

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
SAN JOSE DIVISION

TWILIO, INC.,

Plaintiff,

v.

TELESIGN CORPORATION,

Defendant.

Case No. 16-CV-06925-LHK

**ORDER GRANTING IN PART
DEFENDANT'S MOTION TO DISMISS**

Re: Dkt. No. 31

Plaintiff Twilio, Inc. ("Twilio" or "Plaintiff") filed a patent infringement suit against Defendant Telesign Corporation ("Telesign" or "Defendant") and alleged that Defendant infringed the claims of U.S. Patent Nos. 8,306,021 ("the '021 Patent"), 8,837,465 ("the '465 Patent"), 8,755,376 ("the '376 Patent"), 8,738,051 ("the '051 Patent"), 8,737,962 ("the '962 Patent"), 9,270,833 ("the '833 Patent"), and 9,226,217 ("the '217 Patent") (collectively, the "Asserted Patents"). Before the Court is Defendant's Motion to Dismiss, which seeks to dismiss all seven Asserted Patents. ECF No. 31 ("Mot."). The Court issued its decision on the '962, '833, '021, '465, and '376 patents on March 31, 2017. ECF No. 57. The present order covers the '051 and '217 patents. Having considered the submissions of the parties, the relevant law, and the record in this case, the Court GRANTS Defendant's Motion to Dismiss with respect to the '051 and '217

patents.

I. BACKGROUND

A. Factual Background

1. The Parties

Plaintiff Twilio is a Delaware corporation with its primary place of business in San Francisco, California. ECF No. 1 (“Compl.”) ¶ 1. Plaintiff’s co-founder, Jeffrey Lawson, is a co-inventor on three of the Asserted Patents. ECF No. 45 at 1. Defendant Telesign is a California corporation with its principal place of business in Marina Del Rey, California. Compl. ¶ 15.

2. The Twilio Patents

Plaintiff’s complaint and the parties’ briefing divides the asserted patents into four families: (1) the ’962 and ’833 patents (the “Score Patents”), (2) the ’051 patent (the “Delivery Receipts Patent”), (3) the ’021, ’465, and ’376 patents (the “Platform Patents”), and (4) the ’217 patent (the “Path Selection Patent”). As mentioned above, this order covers the ’051 and ’217 patents, which are the Delivery Receipts Patent and the Path Selection Patent, respectively. An overview of the two patents follows.

a. Delivery Receipt Patent (The ’051 Patent)

i. Specification

The ’051 patent is titled “Method and System for Controlling Message Routing.” Compl., Ex. D (’051 patent). It was filed on July 25, 2013 and issued on May 27, 2014. It claims priority to several provisional applications, the earliest of which was filed on July 26, 2012.

The ’051 patent generally relates to “controlling message routing in the telephony messaging field.” ’051 patent at col. 1:17-18. In general, when a message is sent from one machine (or “node”) to another, it passes through a series of intermediate machines (or “nodes”) before it reaches its final destination. *See id.* at col. 1:40-42, 2:55-65. The process of determining the path that the message takes through these intermediate nodes is often referred to as “routing.” *See id.* at col. 1:40-60.

In modern networks, the sender or the recipient of a message does not retain control over

the route that a message takes through these intermediate nodes. *Id.* at col. 1:47-49, 2:55-65. This is due in part to the fact that the intermediate nodes are often controlled by third-parties who are not affiliated with the sender or the recipient of the message. *See id.* at col. 1:29-35. As a result, the sender or the recipient of the message cannot always trust that an intermediate node will reliably pass a message along to the next intermediate node on its route. *See id.* at col. 1:37-39. Messages can get “altered, delayed dropped, split into multiple messages, suffer from character encoding issues, or have any number of issues due to the message handling of an encountered node on the message’s way to the destination.” *Id.* at col. 1:50-54. This “makes it extremely difficult for a party wishing to send and/or receive a message to ensure the integrity and reliability of communicating a message.” *Id.* at col. 1:55-57.

One prior art solution for ensuring that messages have been reliably delivered is using a delivery receipt, which is an indication sent by the recipient that the message was received. *Id.* at col. 1:46-47. However, a delivery receipt also has reliability problems. Because it also passes through the same third-party, intermediate nodes, there is also no guarantee that it will be reliably transmitted. *See id.* at col. 1:37-39. Thus, at the time of invention, “there remain[ed] a need in the telephony field to create a new and useful method and system for controlling message routing.” *Id.* at col. 1:57-59.

The ’051 patent purports to solve this problem through one primary modification to delivery receipt usage: sending the delivery receipt through a “second channel,” which is different from the one that the original message was sent through. *Id.* at col. 2:53-55, 3:14-15. For example, if a message is sent as a text message over an “SMS message routing channel,” the delivery receipt could be sent through an “internet network channel.” *Id.* at col. 3:14-17.

The ’051 patent integrates this “second channel” feature into a larger method for monitoring and adjusting routing options for sending a message. *Id.* at col. 2:53-55. Figure 1 illustrates this method:

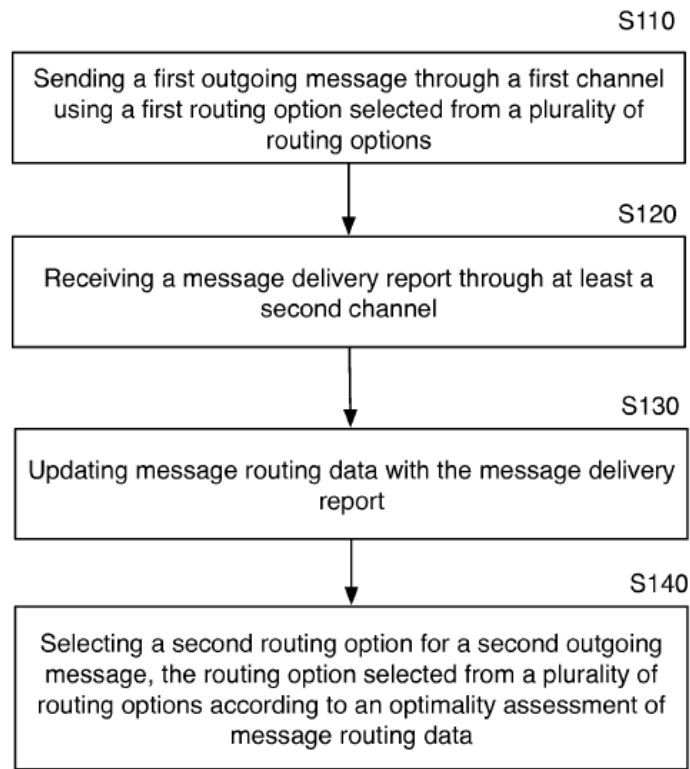


FIGURE 1

At step S110, the message is sent through a “first channel” using a “routing option selected from a plurality of routing options.” *Id.* at col. 3:31-32. In the patent, “[r]outing options are preferably different initial nodes to which a message may be initially sent.” *Id.* at col. 3:35-37. As discussed above, a message will generally pass through a series of intermediate nodes before it reaches its destination, and the sender of the message does not retain control over the path that the message takes through these intermediate nodes. *See id.* at col. 1:40-42, 1:47-49, 2:55-65. Thus, the sender’s selection of an initial node “functions as the fundamental point of control to the full route a message will take to arrive at a destination.” *Id.* at col. 3:65-67. After the message is passed off to the initial node, it will then get passed off to a series of intermediate nodes that lie between the initial node and the message’s destination. *See id.* at col. 1:47-49, 2:55-65.

Eventually, the message will either reach its destination or the destination will determine,

after waiting for a certain period of time, that delivery was unsuccessful. *See id.* at col. 4:23-38. Once either of these events occurs, at step S120, the destination will send a “message delivery report” (i.e., a delivery receipt) to the sender through a “second channel” that is different from the “first channel.” *Id.* at col. 4:19-20. The message delivery report provides feedback on the message’s delivery, such as whether delivery succeeded or failed and/or what condition the message arrived in (e.g., if it was “altered, censored, truncated, encoded improperly, split into multiple messages, or otherwise not conforming to the original outgoing message”). *Id.* at col. 4:25-31, 4:38-44.

At step S130, the information in the message delivery report is used to “adjust the criteria used in selecting routing options” for future messages. *Id.* at col. 6:32-33. The specification refers to this step as “updating message routing data.” *Id.* at col. 6:31-32. For example, “[u]pdating the message routing data can include ranking routing options based at least in part on delivery success rates.” *Id.* at col. 6:42-43. At step S140, this adjusted criteria is put into practice: a “second routing option” is selected for a “second outgoing message.” *Id.* at col. 7:1-5.

Neither the claims nor the specification provides much limitation on how this process must be implemented, or the contexts in which it can be deployed. Instead, the specification makes a number of non-limiting statements, including that: Messages can include “SMS, multimedia messaging service (MMS), image messaging, animation messaging, video messaging, audio/music messaging, internet protocol (IP) messaging, push notifications, and/or any suitable messaging technique.” *Id.* at col. 3:4-9; *see also id.* at col. 11:3-4 (“the messages are preferably SMS or MMS, but can be any suitable type of message”). “There may . . . be a plurality of types of channels available for sending a message such as SMS or MMS, push notifications, or any suitable messaging channel.” *Id.* at col. 4:9-12. “Generating a delivery report may include a number of various implementations,” including “providing a user feedback interface [], redirecting internet and app links through a monitored system [], providing a monitored pin code service [], monitoring a user-reply signal [], and/or using any suitable alternative technique.” *Id.* at col. 4:66-5:7. “The routing options may be characterized by different service providers, networks,

geographic locations, physical machines, resource addresses, contractual agreements, communication protocols, time-dependent quality/performance properties, and/or any other suitable distinguishing characteristics of message routing node.” *Id.* at col. 3:37-42. The “message routing data” can be any collection of data from the message delivery reports or other data sources, including “[d]ata or parameters from routing option contracts, data from message routing infrastructure such as Signaling System No. 7 (SS7), or any other resource that may be used in determining an optimality assessment.” *Id.* at col. 6:50-55.

ii. Asserted Claims

Twilio currently asserts claims 1-8, 11-20, and 22 of the Delivery Receipt Patent. ECF No. 55. Independent claims 1 and 18 recite:

1. A method for transmitting telephony messages comprising:

transmitting a first outgoing telephony message through a first channel using a first routing option selected from a plurality of routing options;

receiving a message delivery report through at least a second channel, wherein the second channel is different from the first channel;

updating message routing data in response to the message delivery report;

selecting a second routing option for at least a second outgoing message, the second routing option selected from the plurality of routing options prioritized by the updated message routing data; and

transmitting the second outgoing telephony message through the first channel using the selected second routing option.

18. A method comprising:

providing a message delivery system with at least two message delivery channel options;

sending a message through the message delivery system with a coded identifier in the content of the message, the message sent through one of the message delivery channel options, and wherein the coded identifier is mapped to the message delivery channel option used in sending the message;

at a code identifier service, tracking use of the coded identifier;

in response to the tracked use of the coded identifier, generating a score of the message delivery channel option based on results of the tracked message delivery.

'051 patent at col. 11:43-59, 12:63-13:9.

b. The Path Selection Patent (The '217 Patent)

i. Specification

The '217 patent is titled "System and Method for Enabling Multi-Modal Communication." Compl., Ex. G ('217 patent). It was filed on April 17, 2015 and issued on December 29, 2015. It claims priority to a provisional application, which was filed on April 17, 2014.

The '217 patent generally relates to "enabling multi-modal communication in the telecommunication field." '051 patent at col. 1:16-17. In modern mobile devices, multiple modes of communication are possible, such as "SMS, MMS, and PSTN voice calls, as well as IP based communication such as client application messaging and VoIP." *Id.* at col. 1:23-25. For example, a user can wish a friend "good morning" from his mobile device by sending a text message (SMS or MMS communication), sending an email (IP based communication), or calling the friend (a PTSN voice call). *See id.* In addition to these options, a user can also communicate with his mobile device using "over the top (OTT) communication" services like WhatsApp. *See id.* at col. 1:27-32, 2:23-27.

However, use of OTT services has a downside: it "can fragment the communication channels so that only those within an OTT provider can communicate." *Id.* at col. 1:33-34. For example, if a user wishes to send a message through WhatsApp, the recipient must also use WhatsApp to receive this message and send a response. *See id.* The recipient cannot receive the message through a different OTT service, SMS, MMS, or some other mode of communication. *See id.*

The '217 patent purports to address this problem through a method for enabling "transparent multi-modal communication" on a "communication platform" such that users can transparently send and receive communications through different modes. *Id.* at col. 2:9-19. For example, the method enables a user to send a text message and have it be received by another user as a WhatsApp message, and vice versa. *See id.* at col. 2:9-19, 2:38-45.

Figure 1 illustrates this method:

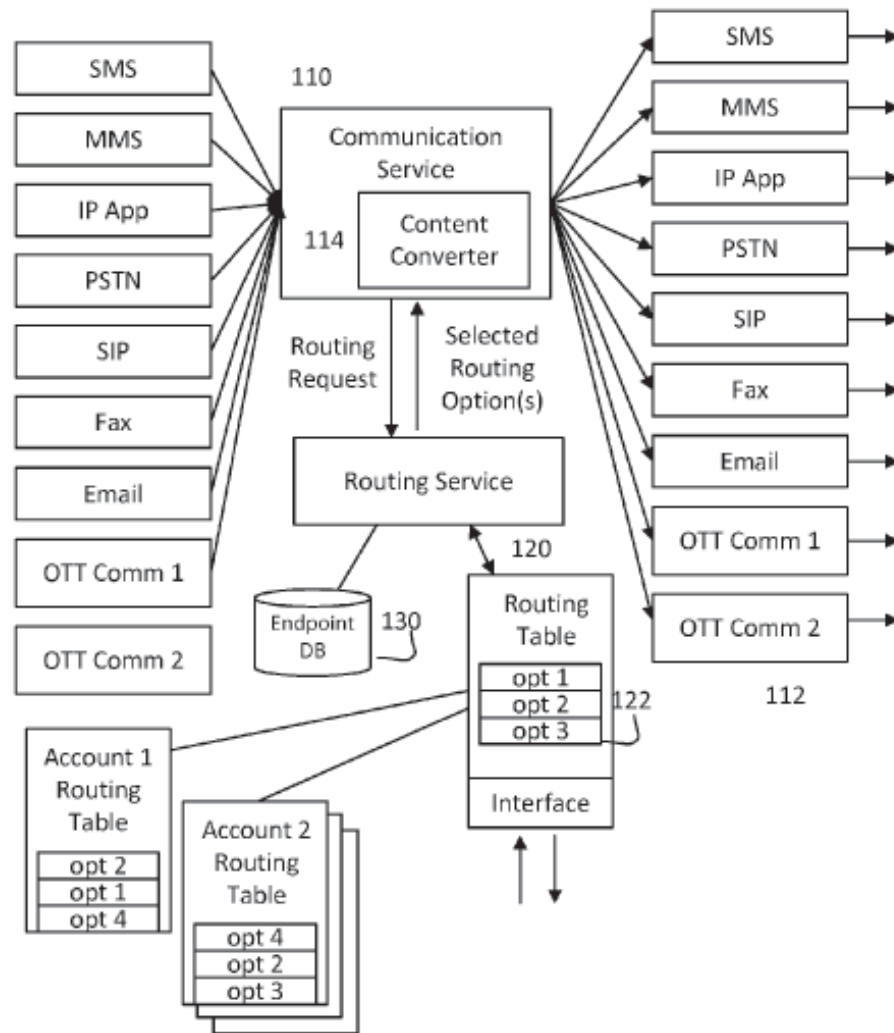


FIGURE 1

A message sent through one of the modes of communication on the left (i.e., “SMS,” “MMS,” “IP App,” “PSTN,” “SIP,” “Fax,” “Email,” “OTT Comm 1,” “OTT Comm 2”) is transmitted to the communication platform (i.e., “communication service” at 110). *Id.* at col. 3:14-4:15, 8:5-9:34. The communication platform then chooses an appropriate mode of communication that suits the message’s intended destination (i.e., “SMS,” “MMS,” “IP App,” “PSTN,” “SIP,” “Fax,” “Email,” “OTT Comm 1,” “OTT Comm 2” at 112), and then sends the message to that destination using that mode of communication. *Id.* at col. 4:16-54, 9:35-12:35. For example, if a user sends a

message through WhatsApp to a destination device that only accepts SMS (i.e., text) messages, the communication platform selects an SMS service as the appropriate mode of communication and sends the message using that SMS service. *See id.*

Figure 10 illustrates the process of selecting the appropriate mode of communication in more detail:

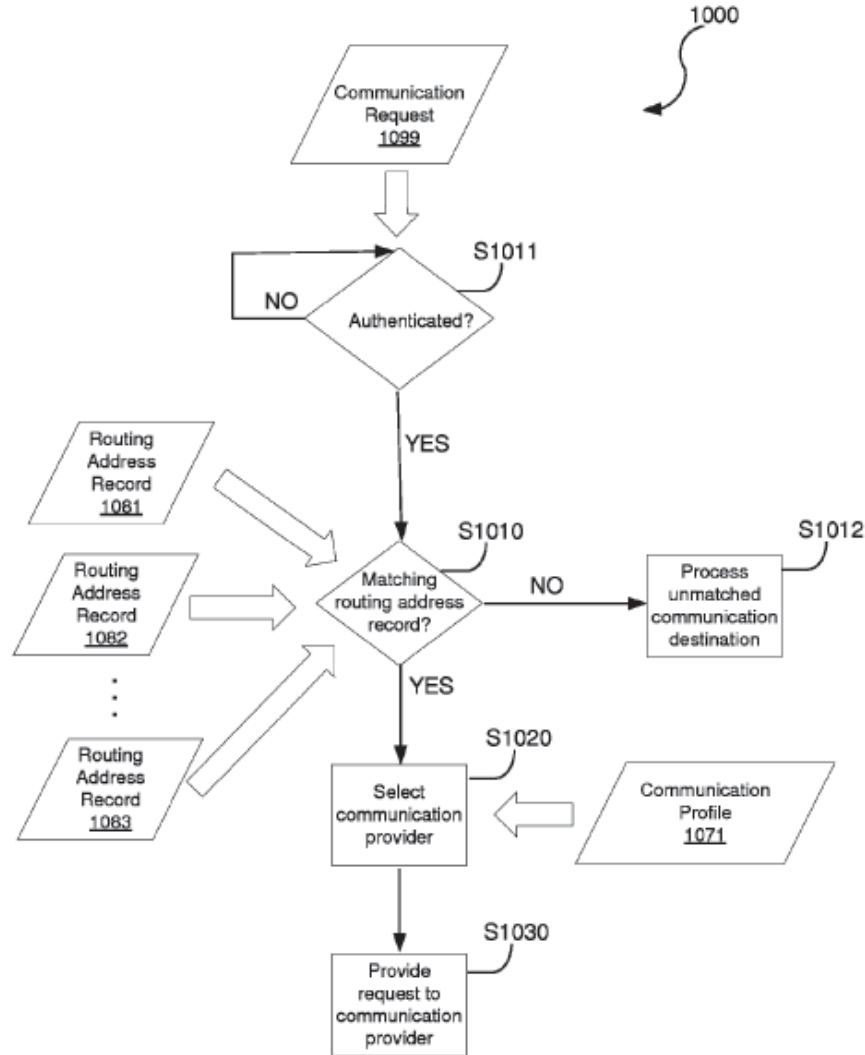


FIGURE 10

When a user sends a message, this is transmitted to the communication platform as a “communication request.” *See id.* at col. 3:14-4:15, 17:23-30. The “communication request” identifies the “communication destination” for the message, which can be a phone number, an email address, an IP address, or “any suitable communication endpoint.” *Id.* at col. 3:17-21, 18:55-58. The “communication request” also includes “account information,” which can include “an account identifier of the external system and an authentication token associated with the account identifier.” *Id.* at col. 18:4-6. For example, the “account identifier of the external system” could be an identifier for a user’s WhatsApp account. *See id.* at col. 18:4-14.

After the “communication request” is received, the communication platform determines whether the “communication request” is authenticated. *Id.* at col. 18:4-14. This “includes authenticating the communication request by using the authentication token, and determining that the communication request is permitted for an account identified by the account identifier.” *Id.* at col. 18:8-14.

Next, the communication platform determines which modes of communication are available for the “communication destination.” *Id.* at col. 17:60-20:50. It does this through a simple database-style lookup: the communication platform stores “routing address records” in an “endpoint information repository.” *Id.* at col. 19:48-50. “[E]ach routing address record . . . associates a communication destination with at least one external communication provider.” *Id.* at col. 18:42-45. For example, a “routing address record” could associate a phone number (the “communication destination”) with an SMS service provider, a PTSN service provider, and an OTT communication service provider (the several “external communication provider[s]”). *See id.* at col. 18:32-20:50. Then, to determine which modes of communication are available for the “communication destination,” the communication platform simply locates the “routing address record” for that “communication destination.” *Id.* at col. 19:44-20:50.

After the communication platform locates the “routing address record” for the “communication destination,” it selects one or several “external communication providers” through which to transmit the message. *Id.* at col. 20:51-23:9. This can be done using a

“communications profile,” which specifies a “priority” and a “weight” for various “external communication providers.” *See id.* at col. 20:62-22:3. However, “any suitable parameter” (instead of or in addition to “priority” and “weight”) can be “used in selecting [an external] communication provider.” *Id.* at col. 22:1-3.

Finally, after the “external communication provider(s)” have been selected, the communication platform “provide[s] a request to establish communication with the communication destination to each selected [external] communication provider.” *Id.* at col. 23:10-12. The “external communication provider(s)” then transmit the message to the “communication destination.” *See id.* at col. 23:17-30.

Neither the claims nor the specification provide much restriction on how this process must be implemented, or the contexts in which it can be deployed. Instead, the specification makes a number of non-limiting statements, including that: “The telephony platform can be . . . any suitable network accessible computing infrastructure. The system may . . . be used in combination with . . . any suitable communication platform.” *Id.* at col. 2:53-3:4. “Routing options . . . can include . . . any suitable communication service.” *Id.* at col. 4:16-27. “The communication destination can be . . . any suitable communication endpoint.” *Id.* at col. 3:17-21. “The communication platform can . . . use any suitable logic to determine a content and destination of a communication.” *Id.* at col. 4:10-13. “The account information can include . . . any suitable source information.” *Id.* at col. 13:29-31.

ii. Asserted Claims

Twilio currently asserts claims 1-12 and 15-19 of the Path Selection Patent. ECF No. 55. Independent claims 1 and 15 recite:

1. A method comprising: at a multi-tenant communication platform:

receiving a request to establish communication, the request being provided by an external system and specifying a communication destination and an account identifier of the external system;

determining whether the account identifier is a valid account identifier of an account that is permitted to establish communication by using the communication platform;

responsive to a determination that the account identifier is a valid account identifier of an account that is permitted to establish communication by using the communication platform:

determining at least one communication provider for the communication destination based on an a [sic] routing address record matching the communication destination, the matching routing address record associating the communication destination with one or more communication providers, the routing address record being stored at the communication platform, each communication provider being external to the communication platform;

selecting one or more of the determined at least one communication provider; and

providing a request to establish communication with the communication destination to each selected communication provider,

wherein the communication platform generates the matching routing address record based on registration information provided to the communication platform for the communication destination by each determined communication provider, and wherein the communication destination matches at least one of a routing address identifier and a deterministic endpoint address specified in the matching routing address record.

15. A method comprising:

at a multi-tenant communication platform, and responsive to authentication of a communication request provided by an external system, the communication request specifying a communication destination and account information:

determining a routing address record of the communication platform that matches the communication destination of the communication request, the matching routing address record associating the communication destination with a plurality of external communication providers;

selecting at least one communication provider associated with the matching routing address record; and

providing a request to establish communication with the communication destination to each selected communication provider.

'217 patent at col. 29:35-30:3, 31:21-27.

B. Procedural History

On December 1, 2016, Plaintiff filed the instant patent infringement suit. In its complaint, Plaintiff alleged that Defendant “has infringed and continues to infringe one or more claims of the [Asserted Patents].” Compl. ¶¶ 75, 91, 106, 135, 156, 169, 184. The products accused included “Defendant’s Smart Verify product,” “Auto Verify product,” “SMS Verify product,” “Voice

Verify Product,” “Push Verify product,” and “Score and Phone ID products.” *Id.* ¶¶ 40-45.

On January 25, 2017, Defendant filed the instant Motion to Dismiss, ECF No. 31 (“Mot.”). On February 9, 2017, Plaintiff filed an opposition to Defendant’s Motion to Dismiss, ECF No. 37 (“Opp’n”), and on February 15, 2017, Defendant filed a reply, ECF No. 39 (“Reply”).

On March 30, 2017, the Court ordered the parties to disclose the asserted claims and accused products identified in Plaintiff’s infringement contentions. ECF No. 53. On March 31, 2017, the parties disclosed these asserted claims and accused products. ECF No. 55.

On March 31, 2017, the Court issued its first order on Defendant’s Motion to Dismiss and found that the asserted claims of the Score Patents were invalid because they were directed to patent-ineligible subject matter under § 101, but that the asserted claims of the Platform Patents were not invalid because they were not directed to patent-ineligible subject matter under § 101.

II. LEGAL STANDARD

A. Motion to Dismiss Pursuant to Federal Rule of Civil Procedure 12(b)(6)

Pursuant to Federal Rule of Civil Procedure 12(b)(6), a defendant may move to dismiss an action for failure to allege “enough facts to state a claim to relief that is plausible on its face.” *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). “A claim has facial plausibility when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged. The plausibility standard is not akin to a ‘probability requirement,’ but it asks for more than a sheer possibility that a defendant has acted unlawfully.” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (internal citations omitted). For purposes of ruling on a Rule 12(b)(6) motion, the Court “accept[s] factual allegations in the complaint as true and construe[s] the pleadings in the light most favorable to the nonmoving party.” *Manzarek v. St. Paul Fire & Marine Ins. Co.*, 519 F.3d 1025, 1031 (9th Cir. 2008).

Nonetheless, the Court is not required to “‘assume the truth of legal conclusions merely because they are cast in the form of factual allegations.’” *Fayer v. Vaughn*, 649 F.3d 1061, 1064 (9th Cir. 2011) (quoting *W. Mining Council v. Watt*, 643 F.2d 618, 624 (9th Cir. 1981)). Mere “conclusory allegations of law and unwarranted inferences are insufficient to defeat a motion to

dismiss.” *Adams v. Johnson*, 355 F.3d 1179, 1183 (9th Cir. 2004); accord *Iqbal*, 556 U.S. at 678. Furthermore, ““a plaintiff may plead [him]self out of court”” if he “plead[s] facts which establish that he cannot prevail on his . . . claim.” *Weisbuch v. Cty. of L.A.*, 119 F.3d 778, 783 n.1 (9th Cir. 1997) (quoting *Warzon v. Drew*, 60 F.3d 1234, 1239 (7th Cir. 1995)).

B. Motions to Dismiss for Patent Validity Challenges Under 35 U.S.C. § 101

Defendant’s Motion asserts that the Asserted Patents fail to claim patent-eligible subject matter under 35 U.S.C. § 101 in light of the United States Supreme Court’s decision in *Alice Corp. Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347 (2014). Whether a claim recites patent-eligible subject matter under § 101 is a question of law. *In re Roslin Inst. (Edinburgh)*, 750 F.3d 1333, 1335 (Fed. Cir. 2014) (“Section 101 patent eligibility is a question of law[.]”); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012) (same). Accordingly, a district court may resolve the issue of patent eligibility under § 101 by way of a motion to dismiss. *See, e.g., Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, 776 F.3d 1343, 1345 (Fed. Cir. 2014) (affirming determination of ineligibility made on 12(b)(6) motion); *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 713 (Fed. Cir. 2014) (same); *see also buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1351 (Fed. Cir. 2014) (affirming determination of ineligibility made on motion for judgment on the pleadings).

Although claim construction is often desirable, and may sometimes be necessary, to resolve whether a patent claim is directed to patent-eligible subject matter, the Federal Circuit has explained that “claim construction is not an inviolable prerequisite to a validity determination under § 101.” *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Can. (U.S.)*, 687 F.3d 1266, 1273-74 (Fed. Cir. 2013). Where the court has a “full understanding of the basic character of the claimed subject matter,” the question of patent eligibility may properly be resolved on the pleadings. *Content Extraction*, 776 F.3d at 1349; *see also Cardpool, Inc. v. Plastic Jungle, Inc.*, 2013 WL 245026, at *4 (N.D. Cal. Jan. 22, 2013) (same), *aff’d*, 817 F.3d 1316 (Fed. Cir. 2016).

C. Substantive Legal Standards Applicable Under 35 U.S.C. § 101

1. Patent-Eligible Subject Matter Under 35 U.S.C. § 101

Section 101 of Title 35 of the United States Code “defines the subject matter that may be patented under the Patent Act.” *Bilski v. Kappos*, 561 U.S. 593, 601 (2010). Under § 101, the scope of patentable subject matter encompasses “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof.” *Id.* (quoting 35 U.S.C. § 101). These categories are broad, but they are not limitless. Section 101 “contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice*, 134 S. Ct. at 2354 (quotation marks omitted). These three exceptions are not patent-eligible because “they are the basic tools of scientific and technological work,” which are “free to all men and reserved exclusively to none.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (quotation marks omitted). The United States Supreme Court has explained that allowing patent claims for such purported inventions would “tend to impede innovation more than it would tend to promote it,” thereby thwarting the primary object of the patent laws. *Id.* at 70. However, the United States Supreme Court has also cautioned that “[a]t some level, all inventions embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Alice*, 134 S. Ct. at 2354 (quotation marks and alterations omitted). Accordingly, courts must “tread carefully in construing this exclusionary principle lest it swallow all of patent law.” *Id.*

In *Alice*, the leading case on patent-eligible subject matter under § 101, the United States Supreme Court refined the “framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts” originally set forth in *Mayo*, 566 U.S. at 77. This analysis, generally known as the “*Alice*” framework, proceeds in two steps as follows:

First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. If so, we then ask, “[w]hat else is there in the claims before us?” To answer that question, we consider the elements of each claim both individually and “as an ordered combination” to determine whether the additional elements “transform the nature of the claim” into a patent-eligible application. We have described step two of this analysis as a search for an “‘inventive concept’

“—i.e., an element or combination of elements that is “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”

Alice, 134 S. Ct. at 2355 (citations omitted and alterations in original); *see also In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016) (describing “the now familiar two-part test described by the U.S. Supreme Court in *Alice*”).

2. *Alice* Step One—Identification of Claims Directed to an Abstract Idea

Neither the U.S. Supreme Court nor the Federal Circuit has set forth a bright line test separating abstract ideas from concepts that are sufficiently concrete so as to require no further inquiry under the first step of the *Alice* framework. *See, e.g., Alice*, 134 S. Ct. at 2357 (noting that “[the U.S. Supreme Court] need not labor to delimit the precise contours of the ‘abstract ideas’ category in this case”); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014) (observing that the U.S. Supreme Court did not “delimit the precise contours of the ‘abstract ideas’ category in *Alice*”) (quotation marks omitted). As a result, in evaluating whether particular claims are directed to patent-ineligible abstract ideas, courts have generally begun by “compar[ing] claims at issue to those claims already found to be directed to an abstract idea in previous cases.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016).

Two of the U.S. Supreme Court’s leading cases concerning the “abstract idea” exception involved claims held to be abstract because they were drawn to longstanding, fundamental economic practices. *See Alice*, 134 S. Ct. at 2356 (claims “drawn to the concept of intermediated settlement, i.e., the use of a third party to mitigate settlement risk” were directed to an unpatentable abstract idea); *Bilski*, 561 U.S. at 611-12 (claims drawn to “the basic concept of hedging, or protecting against risk” were directed to an unpatentable abstract idea because “[h]edging is a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class.”) (quotation marks omitted).

Similarly, the U.S. Supreme Court has recognized that information itself is intangible. *See Microsoft Corp. v. AT & T Corp.*, 550 U.S. 437, 451 n.12, 127 S. Ct. 1746, 167 L.Ed.2d 737 (2007). Accordingly, the Federal Circuit has generally found claims abstract where they are

directed to some combination of collecting information, analyzing information, and/or displaying the results of that analysis. *See FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1094-95 (Fed. Cir. 2016) (claims “directed to collecting and analyzing information to detect misuse and notifying a user when misuse is detected” were drawn to an unpatentable abstract idea); *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d at 611 (claims were “directed to the abstract idea of classifying and storing digital images in an organized manner”); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (claims directed to an abstract idea because “[t]he advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions”); *see also id.* (collecting cases).

However, the determination of whether other types of computer-implemented claims are abstract has proven more “elusive.” *See, e.g., Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1345 (Fed. Cir. 2015) (“[P]recision has been elusive in defining an all-purpose boundary between the abstract and the concrete.”) As a result, in addition to comparing claims to prior U.S. Supreme Court and Federal Circuit precedents, courts considering computer-implemented inventions have taken varied approaches to determining whether particular claims are directed to an abstract idea.

For example, courts have considered whether the claims purport to “improve the functioning of the computer itself,” *Alice*, 134 S. Ct. at 2359, which may suggest that the claims are not abstract, or instead whether “computers are invoked merely as a tool” to carry out an abstract process. *Enfish*, 822 F.3d at 1335; *see also id.* (noting that “some improvements in computer-related technology when appropriately claimed are undoubtedly not abstract, such as a chip architecture, an LED display, and the like. Nor do we think that claims directed to software, as opposed to hardware, are inherently abstract[.]”). The Federal Circuit has followed this approach to find claims patent-eligible in several cases. *See id.* at 1335-36 (claims directed to a specific type of self-referential table in a computer database were not abstract because they focused “on the specific asserted improvement in computer capabilities (i.e., the self-referential

table for a computer database”); *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016) (claims directed to automating part of a preexisting method for 3-D facial expression animation were not abstract because they “focused on a specific asserted improvement in computer animation, i.e., the automatic use of rules of a particular type.”).

Similarly, the Federal Circuit has found that claims directed to a “new and useful technique” for performing a particular task were not abstract. *Thales Visionix Inc. v. United States*, No. 2015-5150, 2017 WL 914618, at *5 (Fed. Cir. Mar. 8, 2017) (holding that “claims directed to a new and useful technique for using sensors to more efficiently track an object on a moving platform” were not abstract); *Rapid Litigation Management Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1045, 1050 (Fed. Cir. 2016) (holding that claims directed to “a new and useful laboratory technique for preserving hepatocytes,” a type of liver cell, were not abstract); *see also Diamond v. Diehr*, 450 U.S. 175, 177, 101 S. Ct. 1048, 67 L.Ed.2d 155 (1981) (holding that claims for a method to calculate the optimal cure time for rubber were not abstract).

Another helpful tool used by courts in the abstract idea inquiry is consideration of whether the claims have an analogy to the brick-and-mortar world, such that they cover a “fundamental . . . practice long prevalent in our system” *Alice*, 134 S. Ct. at 2356; *see, e.g., Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1369 (Fed. Cir. 2015) (finding an email processing software program to be abstract through comparison to a “brick and mortar” post office); *Intellectual Ventures I LLC v. Symantec Corp.*, 100 F. Supp. 3d 371, 383 (D. Del. 2015) (“Another helpful way of assessing whether the claims of the patent are directed to an abstract idea is to consider if all of the steps of the claim could be performed by human beings in a non-computerized ‘brick and mortar’ context.”) (citing *buySAFE*, 765 F.3d at 1353).

Courts will also (or alternatively, as the facts require) consider a related question of whether the claims are, in essence, directed to a mental process or a process that could be done with pen and paper. *See Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1147 (Fed. Cir. 2016) (claims for translating a functional description of a logic circuit into a hardware component description of the logic circuit were invalid because they “can be performed mentally or with

pencil and paper”); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011) (claim for verifying the validity of a credit card transaction over the Internet was invalid because the “steps can be performed in the human mind, or by a human using a pen and paper”); *see also, e.g., Mortgage Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1324 (Fed. Cir. 2016) (claims for computer-implemented system to enable borrowers to anonymously shop for loan packages were abstract where “[t]he series of steps covered by the asserted claims . . . could all be performed by humans without a computer”).¹

Regardless of the particular analysis that is best suited to the specific facts at issue in a case, however, the Federal Circuit has emphasized that “the first step of the [*Alice*] inquiry is a meaningful one, i.e., . . . a substantial class of claims are *not* directed to a patent-ineligible concept.” *Enfish*, 822 F.3d at 1335 (emphasis in original). The court’s task is thus not to determine whether claims merely involve an abstract idea at some level, *see id.*, but rather to examine the claims “in their entirety to ascertain whether their character as a whole is directed to excluded subject matter.” *Internet Patents*, 790 F.3d at 1346.

3. *Alice* Step Two—Evaluation of Abstract Claims for a Limiting Inventive Concept

A claim drawn to an abstract idea is not necessarily invalid if the claim’s limitations—considered individually or as an ordered combination—serve to “transform the claims into a patent-eligible application.” *Content Extraction*, 776 F.3d at 1348. Thus, the second step of the *Alice* analysis (the search for an “inventive concept”) asks whether the claim contains an element or combination of elements that ensures that the patent in practice amounts to significantly more than a patent upon the abstract idea itself. *Alice*, 134 S. Ct. at 2355.

The U.S. Supreme Court has made clear that a transformation of an abstract idea to a patent-eligible application of the idea requires more than simply reciting the idea followed by

¹ One court has noted that, like all tools of analysis, the “pencil and paper” analogy must not be unthinkingly applied. *See California Inst. of Tech. v. Hughes Commc’ns Inc.*, 59 F. Supp. 3d 974, 995 (C.D. Cal. 2014) (viewing pencil-and-paper test as a “stand-in for another concern: that humans engaged in the same activity long before the invention of computers,” and concluding that test was unhelpful where “error correction codes were not conventional activity that humans engaged in before computers”).

“apply it.” *Id.* at 2357 (quoting *Mayo*, 132 S. Ct. at 1294). In that regard, the Federal Circuit has repeatedly held that “[f]or the role of a computer in a computer-implemented invention to be deemed meaningful in the context of this analysis, it must involve more than the performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at 1347-48 (quoting *Alice*, 134 S. Ct. at 2359) (alterations in original); *see also Mortgage Grader*, 811 F.3d at 1324–25 (holding that “generic computer components such as an ‘interface,’ ‘network,’ and ‘database’ . . . do not satisfy the inventive concept requirement.”); *Bancorp Servs.*, 687 F.3d at 1278 (“To salvage an otherwise patent-ineligible process, a computer must be integral to the claimed invention, facilitating the process in a way that a person making calculations or computations could not.”). Similarly, “[i]t is well-settled that mere recitation of concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea” where those components simply perform their “well-understood, routine, conventional” functions. *In re TLI Commc’ns.*, 823 F.3d at 613 (limitations of “telephone unit,” “server,” “image analysis unit,” and “control unit” insufficient to satisfy *Alice* step two where claims drawn to abstract idea of classifying and storing digital images in an organized manner) (quotation marks omitted).

In addition, the U.S. Supreme Court explained in *Bilski* that “limiting an abstract idea to one field of use or adding token postsolution components [does] not make the concept patentable.” 561 U.S. at 612 (citing *Parker v. Flook*, 437 U.S. 584 (1978)); *see also Alice*, 134 S. Ct. at 2358 (same). The Federal Circuit has similarly stated that attempts “to limit the use of the abstract idea to a particular technological environment” are insufficient to render an abstract idea patent eligible. *Ultramercial*, 772 F.3d at 716 (quotation marks omitted); *see also Intellectual Ventures*, 792 F.3d at 1366 (“An abstract idea does not become nonabstract by limiting the invention to a particular field of use or technological environment, such as the Internet.”).

In keeping with these restrictions, the Federal Circuit has found that claims “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks” can be sufficiently transformative to supply an inventive concept. *DDR*, 773

F.3d at 1257 (claims that addressed the “Internet-centric problem” of third-party merchant advertisements that would “lure . . . visitor traffic away” from a host website amounted to an inventive concept).

In addition, a “non-conventional and non-generic arrangement of known, conventional pieces” can amount to an inventive concept. *BASCOM*, 827 F.3d at 1350. For example, in *BASCOM*, the Federal Circuit addressed a claim for internet content filtering performed at “a specific location, remote from the end-users, with customizable filtering features specific to each end user.” *Id.* Because this “specific location” was different from the location where internet content filtering was traditionally performed, the Federal Circuit concluded this was a “non-conventional and non-generic arrangement of known, conventional pieces” that provided an inventive concept. *Id.* As another example, in *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, the Federal Circuit found that claims relating to solutions for managing accounting and billing data over large, disparate networks recited an inventive concept because they contained “specific enhancing limitation[s] that necessarily incorporate[d] the invention’s distributed architecture.” 841 F.3d 1288, 1301 (Fed. Cir. 2016). The use of a “distributed architecture,” where information about accounting and billing data was stored near the source of the information in the “disparate networks,” transformed the claims into patentable subject matter. *Id.*

4. Preemption

In addition to these principles, courts sometimes find it helpful to assess claims against the policy rationale for § 101. The United States Supreme Court has recognized that the “concern that undergirds [the] § 101 jurisprudence” is preemption. *Alice*, 134 S. Ct. at 2358. Thus, if a claim is so abstract so as to “pre-empt use of [the claimed] approach in all fields, and would effectively grant a monopoly over an abstract idea,” it is not patent-eligible. *Bilski* 561 U.S. at 612. However, the inverse is not true: “[w]hile preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *FairWarning*, 839 F.3d at 1098 (internal quotation marks and citation omitted).

III. DISCUSSION

Defendant's Motion to Dismiss contends that the asserted claims of the '051 and '217 patents fall within the patent-ineligible "abstract ideas" exception to § 101. The Court applies the *Alice* framework described above to these claims.

A. Scope of Analysis and Representative Claims

Before turning to the substance of the parties' eligibility arguments, the Court clarifies the scope of the claims to be assessed. Currently Plaintiff is asserting the following claims in the Delivery Receipt and Path Selection Patents: claims 1-8, 11-20, and 22 of the '051 patent; and claims 1-12 and 15-19 of the '217 patent. ECF No. 55.

Nevertheless, the Court need not individually analyze every claim, if certain claims are representative. *See generally Alice*, 134 S. Ct. at 2359-60 (finding 208 claims to be patent-ineligible based on analysis of one representative claim). Often, parties will agree that certain claims are representative for the purposes of a § 101 analysis. *See, e.g., Synopsys*, 839 F.3d at 1147 (parties agreed that certain claims were representative); *Intellectual Ventures*, 838 F.3d at 1313 (parties agreed that certain claims were representative). However, when they do not, a district court may make this determination on its own. *Content Extraction*, 776 F.3d at 1348 ("The district court . . . correctly determined that addressing each claim of the asserted patents was unnecessary. *After conducting its own analysis*, the district court determined that [certain claims] are representative . . .") (emphasis added).²

Here, the parties dispute whether representative claims can guide the Court's analysis, and

² The district court may do this even when one party asserts that certain claims are not representative. In *Content Extraction*, the plaintiff urged the district court to deny the defendant's § 101 motion because the defendant did not individually address the patentability of every claim. *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, No. 12-2501 MAS TJB, 2013 WL 3964909, at *5 (D.N.J. July 31, 2013), *aff'd*, 776 F.3d 1343 (Fed. Cir. 2014). Nevertheless, the Federal Circuit upheld the district court's determination, "[a]fter conducting its own analysis," that the claims were representative. *Content Extraction*, 776 F.3d at 1348. The Federal Circuit also noted that the plaintiff could have challenged the defendant's characterization of certain claims as representative, but did not, effectively waiving this argument. *See id.* ("If CET disagreed with PNC's or the district court's assessment, CET could have identified claims in its opposition brief that it believed would not be fairly represented by claims 1 of the '855 and '416 patents for purposes of PNC's § 101 challenge.").

who bears the burden of showing that certain claims are representative. *Compare* Mot. at 3, Reply at 2, *with* Opp’n at 5. The Court need not delve into these arguments because, for the reasons discussed below, the Court can address all the claims of these patents. It will do so by first assessing the patentability of the allegedly representative claim of each patent, and then using that as a basis for analyzing the remaining claims.

B. Delivery Receipt Patent (The ’051 Patent)

The Court now turns to the ’051 patent and determines whether the asserted claims of this patent are patent-ineligible under § 101. The Court begins with claim 1 of the ’051 patent, the only claim for which either party has provided substantial briefing, and then turns to the remaining claims.

1. *Alice* Step One for Claim 1 of the ’051 Patent—Whether the Claim is Directed to an Abstract Idea

Step one of the *Alice* framework directs the Court to assess “whether the claims at issue are directed to [an abstract idea].” *Alice*, 134 S. Ct. at 2355. On this point, Defendant contends that claim 1 is directed to “finding the best routing option for transmitting messages based on a delivery receipt (. . . the message delivery report of claim 1 . . .).” Mot. at 10. Defendant argues that this concept is similar to other abstract ideas identified in other district court cases. *Id.* at 10-11. Defendant also emphasizes that claim 1 recites this idea at a high level of generality and does not recite concrete structures or implementation details. *Id.* at 11.

Plaintiff responds that claim 1 is not directed to an abstract idea because it is instead directed to a specific improvement in computer capabilities. Opp’n at 8. Specifically, Plaintiff argues that claim 1 is directed to an improved method for ensuring that messages are transmitted through the best (e.g., most reliable) routing option which “use[es] different channels for outgoing message and message delivery reports.” *Id.*

The step one inquiry “applies a stage-one filter to claims, considered in light of the specification, based on whether ‘their character as a whole is directed to excluded subject matter.’” *Enfish*, 822 F.3d at 1335. Thus, the Court conducts its step one inquiry by first identifying what

the “character as a whole” of claim 1 of the ’051 patent is “directed to,” and then discussing whether this is an abstract idea.

a. Claim 1 of the ’051 Patent—“Directed to” Inquiry

The Court begins by examining claim 1 of the ’051 patent in its entirety to understand what its “character as a whole” is “directed to.” *Elec. Power*, 830 F.3d at 1353 (“[W]e have described the first-stage inquiry as looking at the ‘focus’ of the claims, their ‘character as a whole’”); *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1341 (Fed. Cir. 2013) (“[T]he court must first identify and define whatever fundamental concept appears wrapped up in the claim.”) (quotation marks omitted). In distilling the purpose of a claim, the Court is careful not to express the claim’s fundamental concept at an unduly “high level of abstraction . . . untethered from the language of the claims,” but rather at a level consonant with the level of generality or abstraction expressed in the claims themselves. *Enfish*, 822 F.3d at 1337; *see also Thales Visionix*, 2017 WL 914618, at *3 (“We must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful.”).

Claim 1 recites two types of transmissions: (1) sending a message through a “first channel” using one of several “routing options;” and (2) receiving a message delivery report through a “second channel” which is different from the “first channel.” ’051 patent at col. 11:45-50, 11:57-59. The majority of the claim then describes how the system uses the separately-transmitted message delivery report as feedback to help it select the best “routing option” for future messages: “routing data” is updated based on the message delivery report, the updated “routing data” is used to create a prioritized list of “routing options,” and the “routing option” for the next message is selected from this prioritized list. *Id.* at col. 11:51-59.

Reading the entirety of claim 1 of the ’051 patent for its character as a whole, the Court finds that claim 1 is “directed to” selecting the best message routing option based on separately-transmitted feedback. Apart from background descriptions about the two types of transmissions in the system, the majority of the limitations of claim 1 describe this process. *See id.* at col. 11:51-

59; compare *Ultramercial*, 772 F.3d at 715 (identifying the “concept embodied by the *majority* of the limitations” in its step one analysis) (emphasis added). This “directed to” statement is also consistent with the specification because the statement provides that the patented method “functions to enable real-time adjustments to message routing according to feedback through a secondary channel.” *Id.* at col. 2:53-55. Thus, “selecting the best message routing option based on separately-transmitted feedback” meaningfully captures the “character as a whole” of claim 1.

b. Claim 1 of the ’051 Patent—Abstract Idea Analysis

Having determined the “character as a whole” of claim 1, the Court turns to whether it is directed to an abstract idea. *Enfish*, 822 F.3d at 1335. As discussed above, courts will generally compare the claims at issue to prior § 101 cases, as well as consult several guideposts, including: (1) whether the claims are directed to an “improvement to computer functionality;” (2) whether the claims are directed to a “new and useful technique;” (3) whether the claims have an analogy to the brick-and-mortar world; and (4) whether the claims are directed to a mental process or a process that can be performed with a pen and paper. *See* Section II.C, *supra*.

For the reasons discussed below, the Court finds that the brick-and-mortar analogy, applied in the same way other Federal Circuit and district court cases have applied it, confirms that claim 1 is directed to an abstract idea. Thus, the Court will discuss this guidepost and then turn to Plaintiff’s remaining arguments, which all relate to the “improvement to computer functionality” guidepost.

i. Brick and Mortar Analogy

The United States Supreme Court has held that “fundamental . . . practice[s] long prevalent in our system” and “method[s] of organizing human activity” are abstract ideas. *Alice*, 134 S. Ct. at 2356 (citations and internal quotation marks omitted). Several Federal Circuit and district court cases applying these principles are instructive here. The Court reviews each in turn, and then applies this same reasoning to claim 1 of the ’051 patent.

In *DIRECTV*, the Federal Circuit concluded that claims directed to “providing out-of-region access to regional broadcast content” were directed to an abstract idea because this was a

“broad and familiar concept concerning information distribution that is untethered to any specific or concrete way of implementing it.” 838 F.3d at 1258. In so reasoning, the Federal Circuit noted that “[t]he practice of conveying regional content to out-of-region recipients” had been employed “by nearly every form of media” for decades, and was “not tied to any particular technology.” *Id.* Instead, it “can be implemented in myriad ways ranging from the low-tech, such as by mailing copies of a local newspaper to an out-of-state subscriber, to the high-tech, such as by using satellites to disseminate broadcasts of sporting events.” *Id.* Accordingly, the Federal Circuit reasoned, it was an abstract idea. *See id.* The court then concluded that because the claims were drawn to this same abstract idea (not any particular way of implementing it), they too were abstract. *Id.* It noted that the claims “confine[d] the abstract idea to a particular technological environment—in this case, cellular telephones,” but this did not make the claims not abstract. *Id.* at 1258-59. To the contrary, “[t]he Supreme Court and this court have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract.” *Id.* at 1259 (citations omitted).

In *Intellectual Ventures*, the Federal Circuit concluded that claims relating to “receiving, screening, and distributing e-mail” were directed to an abstract idea. 838 F.3d at 1316. The claims at issue there recited steps of receiving email messages and applying business rules to control the delivery of the email messages. *Id.* at 1316-17. The Federal Circuit found these steps analogous to those performed by corporate mailrooms, which “receive correspondence, keep business rules defining actions to be taken regarding correspondence based on attributes of the correspondence, apply those business rules to correspondence, and take certain actions based on the application of business rules.” *Id.* at 1317. Thus, the claims were directed to “fundamental . . . practice[s] long prevalent in our system” and “method[s] of organizing human activity,” and hence, were directed to an abstract idea. *Id.* at 1318.

In *Mobile Telecoms. Techs., LLC v. Blackberry Corp.*, the Northern District of Texas found that claims relating to “utilizing a two-way communication network to process data messages that cannot be successfully transmitted from a network operations center (‘NOC’) to a

mobile unit” were abstract. No. 3:12-cv-1652, 2016 U.S. Dist. LEXIS 63067, at *6 (E.D.T.X. May 12, 2016). The court found that the claims were “directed to the basic idea of sending and storing messages, which is not rooted in computer technology.” *Id.* at *8. Instead, this is a “routine task that could be performed by a human,” such as “a courier attempting to deliver a package.” *Id.* As such, the court concluded, the claims were directed to an abstract idea. *Id.*

Although the substance of claim 1 of the ’051 patent is different from the claims at issue in the above cases, the Court finds that it presents an analogous situation. As discussed above, claim 1 of the ’051 patent is directed to selecting the best message routing option based on separately-transmitted feedback. Selecting the best option based on separately-received feedback is a fundamental activity that has long been performed by humans. For example, a person choosing among dinner restaurants may select a restaurant based on diner reviews from a third-party service instead of soliciting information from the restaurants themselves. As another example, a person wishing to send a package may select between FedEx, UPS, and USPS based on feedback in online forums from other customers who have used those services instead of getting information from FedEx, UPS, and USPS themselves. Thus, selecting the best option based on separately-received feedback constitutes a “fundamental . . . practice long prevalent in our system.” *Alice*, 134 S. Ct. at 2356 (citations and internal quotation marks omitted). As such, it is an abstract idea. *Id.*

The only difference between claim 1 of the ’051 patent and these real-world examples is that claim 1 applies this fundamental practice to message routing. Instead of selecting a restaurant or a package delivery service, claim 1 selects a “routing option,” e.g., the first node to which a message should be passed. ’051 patent at col. 11:45-47, 11:53-56. This is a classic case of limiting an abstract idea’s field of use to a certain technological environment. *Compare, e.g., DIRECTV*, 838 F.3d at 1258-59 (claims relating to “wireless delivery of regional broadcast content to cellphones” were instances of “confin[ing] the abstract idea [of providing out-of-region access to regional broadcast content] to a particular technological environment—in this case, cellular telephones”). As was the case in *DIRECTV*, claim 1 does not recite any specific

implementation of the fundamental practice of selecting the best option based on separately-received feedback. *Compare id.* at 1258. Instead, it recites this fundamental practice generically and at a high-level, and simply deploys it in the context of message routing. *See* '051 patent at col. 11:43-59.

“The Supreme Court and [the Federal Circuit] have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract.” *DIRECTV*, 838 F.3d at 1259 (citations omitted); *see also*, e.g., *Intellectual Ventures*, 838 F.3d at 1317-18 (claims abstract where fundamental practice of processing mail with business rules applied to email); *Mobile Telecoms. Techs.*, 2016 U.S. Dist. LEXIS 63067, at *6 (claims abstract where fundamental practice of sending and storing messages applied to data messages). Thus, because it simply takes an abstract idea and limits its use to a technological environment, claim 1 is directed to an abstract idea.

ii. Improvement to Computer Functionality

Plaintiff nevertheless contends that claim 1 of the '051 patent is not directed to an abstract idea because it is instead directed to an “improvement in computer functionality” under *Enfish*. Opp’n at 8-9. Specifically, Plaintiff argues that claim 1 “takes advantage of the availability of multiple communications channels to provide more reliable feedback about message routing.” *Id.* at 8. This is unpersuasive.

As discussed above, in *Enfish*, the Federal Circuit held that it is “relevant to ask whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea.” 822 F.3d at 1335. When considering claims purportedly directed to “an improvement of computer functionality,” the Court must “ask whether the focus of the claims is on the specific asserted improvement in computer capabilities . . . or, instead, on a process that qualifies as an ‘abstract idea’ for which computers are invoked merely as a tool.” *Id.* at 1335-36. For example, in *Enfish*, the Federal Circuit found that claims directed to a specific type of self-referential table in a computer database were not abstract because they focused “on the specific asserted improvement in computer capabilities (i.e., the self-referential table for a computer

database).” *Id.*

Claim 1 of the ’051 patent is distinguishable from *Enfish*. As discussed above, claim 1 of the ’051 patent is directed to selecting the best message routing option based on separately-transmitted feedback. Nothing about this improves the functioning of a computer itself. Rather, at most, it contemplates using a computer as a tool for implementing this idea. *Compare, e.g., DIRECTV*, 838 F.3d at 1262 (claims for “providing out-of-region access to regional broadcast content” were “directed not to an improvement in cellular telephones but simply to the use of cellular telephones as tools in the aid of a process focused on an abstract idea”). It is also no answer that, as Plaintiff contends, claim 1 provides an improvement to technology by “provid[ing] more reliable feedback about message routing.” Opp’n at 8. In *Enfish*, a specific technology—the computer database—was itself improved. *See Enfish*, 822 F.3d at 1335-36 (claims directed to a specific type of self-referential table in a computer database were not abstract because they focused “on the specific asserted improvement in computer capabilities (i.e., the self-referential table for a computer database)”). Claim 1, by contrast, does not improve message routing technology itself. Thus, for this reason as well, claim 1 is not directed to an “improvement in computer functionality” under *Enfish*.

In sum, claim 1 is directed to a “fundamental . . . practice long prevalent in our system,” *Alice*, 134 S. Ct. at 2356 (citations and internal quotation marks omitted), limited to a specific technical environment. It is not directed to an “improvement in computer functionality” under *Enfish*. 822 F.3d at 1335. Thus, it is directed to an abstract idea.

2. *Alice* Step One for Remaining Asserted Claims of the ’051 Patent—Whether the Claims are Directed to an Abstract Idea

Having determined that claim 1 of the ’051 patent is directed to an abstract idea, the Court turns to the remaining asserted claims of the ’051 patent to determine whether they too are directed to abstract ideas. The Court begins with the claims that depend on claim 1, claims 2-8 and 11-17, and then addresses claim 18 (the other independent claim of the ’051 patent), and finally addresses the claims that depend on claim 18, claims 19-20 and 22-23.

a. Claims 2-8 and 11-17 of the '051 Patent

Claims 2-8 and 11-17 depend on claim 1. The additional limitations of claims 2-8, 11-14, and 17 add minor restrictions on certain elements of claim 1, such as types of channels,³ types of routing options,⁴ how message routing data is updated,⁵ and details regarding the delivery and content of the message delivery report.⁶ Despite these limitations, the focus of these claims is the same as claim 1's (i.e., selecting the best message routing option based on separately-transmitted feedback). Thus, for the same reasons that claim 1 is directed to an abstract idea, claims 2-8, 11-14, and 17 are as well.

Claims 15 and 16, however, introduce more significant variations. Claim 15 introduces the step of modifying the second outgoing message before it is transmitted, and claim 16 restricts the ways in which this modification happens. '051 patent at col. 12:51-58. This shifts the focus of these claims, such that they are not simply directed to "selecting the best message routing option based on separately-transmitted feedback," but are also directed to modifying the message based on that separately-transmitted feedback. Nevertheless, the Court finds that, even with this modification, claims 15 and 16 are also directed to an abstract idea. An abbreviated version of the Court's abstract idea analysis confirms this:

As discussed above, selecting the best message routing option based on separately-transmitted feedback is a fundamental human activity, applied to a specific technical environment.

³ In particular, claim 2 restricts the "first channel" to a SMS channel. '051 patent at col. 11:60-62. Claim 3 restricts the "first channel" to an MMS channel. *Id.* at col. 11:63-65. Claim 7 restricts the "second channel" to an internet protocol network. *Id.* at col. 12:10-11.

⁴ In particular, claim 4 restricts the "routing options" to at least include a set of message delivery gateway destinations, at least a subset of which are different carriers. '051 patent at col. 11:66-12:2.

⁵ In particular, claim 5 restricts the step of updating message routing data to ranking routing options based on success rates. '051 patent at col. 12:3-6. Claims 13 and 14 additionally require that message routing data is updated according to specific classifications assigned to outgoing message(s). *Id.* at col. 12:38-45.

⁶ In particular, claim 6 additionally clarifies how a message is determined to be "undelivered." '051 patent at col. 12:7-9. Claim 8 additionally requires that the message delivery report is received through an API. *Id.* at col. 12:12-15. Claim 11 recites a pin code variation of messages and message delivery reports. *Id.* at col. 12:26-31. Claim 12 additionally requires generating message delivery reports by monitoring user responses. *Id.* at col. 12:32-37. Claim 17 additionally requires exposing confirmation of message delivery through an API. *Id.* at col. 12:59-62.

The same can be said for modifying a message based on that separately-transmitted feedback. Specifically, humans have long been modifying content based on separately-transmitted feedback. For example, a restaurant may modify the information it provides about its offerings based on diner reviews from a third-party service. Similarly, a shipping service like UPS may modify how it delivers packages based on feedback in online forums from customers who have used its services. Thus, even though claims 15 and 16 are directed to both selecting the best message routing option based on separately-transmitted feedback and modifying the message based on that separately-transmitted feedback, they are still directed to fundamental human activity, applied to a specific technical environment. Thus, they too are directed to an abstract idea.

b. Claim 18 of the '051 Patent

Claim 18 is an independent claim in the '051 patent. Like claim 1, it involves message delivery using multiple channels. *Compare id.* at col. 11:43-59, *with id.* at col. 12:63-13:8. However, it varies from claim 1 in that it requires “sending a message . . . with a coded identifier [which is] mapped to the message delivery channel option used in sending the message,” “tracking use of the coded identifier,” and “in response to the tracked use of the coded identifier, generating a score of the message delivery channel option.” *Id.* Defendant contends that this “tracked message delivery” is simply a “delivery receipt,” such that claim 18 is directed to the same subject matter as claim 1. Mot. at 10. Plaintiff responds that claim 18 is directed to entirely different subject matter from claim 1—namely, “an improvement relating to a two-factor authentication service.” Opp’n at 6.

The Court agrees with Defendant. Although, as discussed above, the language of claim 18 differs from claim 1, the Court finds that its “character as a whole” is directed to substantially the same subject matter: selecting the best message routing option based on separately-transmitted feedback. This follows from a simple parsing of claim 18. Claim 18 requires a “message delivery system” that uses “at least two message delivery channel options” and “generat[es] a score” for the message delivery channel that is currently being used. '051 patent at col. 12:63-65, 13:7-9. Multiple “message delivery channel options” imply multiple “scores.” *See id.* This “score” is

then based on separately-transmitted feedback: namely, the “tracked use of the coded identifier,” which is transmitted through a “code identifier service.” *Id.* at col. 12:66-13:9. Thus, like claim 1, claim 18 uses separately-transmitted feedback to assess the performance of multiple message delivery channels. As such, it is directed to substantially the same subject matter: selecting the best message routing option based on separately-transmitted feedback. As discussed above, this is an abstract idea. Thus, like claim 1, claim 18 is directed to an abstract idea.

c. Claims 19-20 and 22-23 of the '051 Patent

Claims 19-20 and 22-23 depend on claim 18. The additional limitations of these claims add minor restrictions on certain elements of claim 18, such as the type of coded identifier used⁷ and subsequent use of the claimed method.⁸ This does not alter their focus from claim 18's. Thus, for the same reasons that claim 18 is directed to an abstract idea, claims 19-20 and 22-23 are as well.

3. *Alice* Step Two for Claim 1 of the '051 Patent—Evaluation of Abstract Claims for an Inventive Concept

Having found that the asserted claims of the '051 patent are directed to an abstract idea under step one of *Alice*, the Court proceeds to step two. Here too the Court begins its analysis with claim 1 of the '051 patent. At step two, the Court must “consider the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1298, 1297). The United States Supreme Court has described this as a “search for an ‘inventive concept’—i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Id.*

⁷ In particular, claim 19 recites a pin code variation of the coded identifier. '051 patent at col. 13:10-17. Claim 20 recites a redirection-URI variation of the coded identifier. *Id.* at col. 13:18-14:3.

⁸ In particular, claim 22 recites using the score when transmitting subsequent messages. '051 patent at col. 17:7-11. Claim 23 recites using the score when transmitting subsequent messages belonging to the same classification. *Id.* at col. 14:12-18.

Here, Defendant contends that the claims do not recite an inventive concept because the functions and components recited are purely conventional. Mot. at 12. In particular, Defendant argues that the claims do not restrict the communications channels and the messages sent within them to anything other than conventional, generic forms. *Id.* at 12-13. Defendant also argues that the “receiving” step implicates conventional forms of feedback, and the “updating” step consists of adjusting conventional items, such as price, contract obligations, and time of day. *Id.* at 13.

Plaintiff argues that Defendant’s inventive concept arguments are inadequate because they focus only on individual limitations and “do not address the details of each limitation, including for example, the channel and routing option limitations.” Opp’n at 12. Plaintiff also argues that the ordered combination of claim elements provides an inventive concept akin to *DDR* and *BASCOM* because they provide a specific technological improvement: “a specific, discrete implementation of using the combination of multiple communication channels to select from multiple routing options to ensure message reliability.” *Id.* at 11-12.

In assessing whether a claim recites an inventive concept, the Court, under *Alice*, must consider its elements “both individually and ‘as an ordered combination.’” *Alice*, 134 S. Ct. at 2355. The Court begins with the individual claim elements, and then turns to their ordered combination.

a. Individual Claim Elements

Turning first to the individual claim elements, the Court finds that none of these elements, by themselves, provide an “inventive concept.” As discussed above, the United States Supreme Court has held that “generic computer implementation” is insufficient to transform a patent-ineligible abstract idea into a patent-eligible invention. *Alice*, 134 S. Ct. at 2352, 2357. Such “generic computer implementation” includes “computer functions [that are] ‘well-understood, routine, conventional activit[ies]’ previously known to the industry.” *Id.* at 2359 (quoting *Mayo*, 132 S. Ct. at 1294). Accordingly, the Federal Circuit has consistently declined to find that an individual claim element supplies an inventive concept where it is nothing more than a “generic computer component[]” or a recitation of a “routine” or “conventional” computer function. *See*,

e.g., *DIRECTV*, 838 F.3d at 1263 (no inventive concept where the claim “simply recites that the abstract idea of remote delivery will be implemented using the conventional components and functions generic to cellular telephones”); *Intellectual Ventures*, 850 F.3d at 1332 (no inventive concept where “the claims recite both a generic computer element—a processor—and a series of generic computer ‘components’ that merely restate their individual functions—i.e., organizing, mapping, identifying, defining, detecting, and modifying”); *Content Extraction*, 776 F.3d at 1345, 1348 (“storing information” into memory, and using a computer to “translate the shapes on a physical page into typeface characters,” do not recite inventive concepts).

None of the elements of claim 1, assessed individually, amount to anything more than “generic computer implementation.” The steps of claim 1 recite four functions: “transmitting,” “receiving,” “updating,” and “selecting.” ’051 patent at col. 11:43-59. All of these are routine, generic computer functions. *See Alice*, 134 S. Ct. at 2359. The same can be said for the components on which these functions are performed, namely: the first and second outgoing “telephony message[s]”; the first and second “channel”; the first and second “routing option[s]”; the “message delivery report”; and the “message routing data.” ’051 patent at col. 11:43-59. These are generic computer components, and nothing in the claims or specification limits them to specific implementations. Instead, as discussed above, the specification confirms their generic nature. *See id.* at col. 3:4-9 (telephony messaging can be “any suitable messaging technique”); *id.* at col. 3:37-42 (“routing options may be characterized by . . . any . . . suitable distinguishing characteristics of message routing node”); *id.* at col. 4:9-12 (channels can be “any suitable messaging channel”); *id.* at col. 4:19-44 (describing suggested content of the message delivery report with no mention of data structures); *id.* at col. 4:66-5:7 (“[g]enerating a delivery report may include a number of various implementations” or “any suitable alternative technique”); *id.* at col. 6:50-55 (message routing data can be any collection of data from the message delivery reports or other data sources, including “any . . . resource that may be used in determining an optimality assessment”). Thus, none of the individual claim elements amount to anything more than “generic computer implementation” and do not provide an inventive concept.

b. Ordered Combination

Turning to the ordered combination of elements of claim 1, Plaintiff identifies “using the combination of multiple communication channels to select from multiple routing options to ensure message reliability” as the inventive concept that renders claim 1 patentable. Opp’n at 11. The Court disagrees. Plaintiff’s argument is based on two Federal Circuit cases: *BASCOM* and *DDR*. The Court addresses each in turn.

In *BASCOM*, the Federal Circuit found that “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *BASCOM*, 827 F.3d at 1350. In that case, the Federal Circuit addressed a claim for internet content filtering performed at “a specific location, remote from the end-users, with customizable filtering features specific to each end user.” *Id.* Because this “specific location” was different from the location where internet content filtering was traditionally performed, the Federal Circuit concluded this was a “non-conventional and non-generic arrangement of known, conventional pieces” that provided an inventive concept. *Id.*

Here, the Court finds that the ordered combination of elements in claim 1 is not a “non-conventional and non-generic arrangement of known, conventional pieces.” *BASCOM*, 827 F.3d at 1350. Instead, claim 1 specifies steps at a high level of generality to carry out the abstract idea of selecting the best message routing option based on separately-transmitted feedback. Nothing in the claims or the specification suggests that any of its elements are arranged in a non-conventional or non-generic way. *See generally, e.g.*, ’051 patent at col. 1:22-60 (discussing state of message routing at the time of the invention). Plaintiff nevertheless suggests that “using the combination of multiple communication channels” constitutes a non-conventional and non-generic arrangement of components. Opp’n at 11-12. This, however, is belied by the specification, which makes clear that multiple messaging channels existed at the time of the invention. *See* ’051 patent at col. 3:4-9 (describing different types of telephony messaging); *see id.* at col. 4:9-12 (describing different messaging channels). Selecting one channel for one type of message and a different channel for another type of message is not unconventional. Instead, this is nothing more than choosing one

1 conventional alternative over another to serve a conventional role. This is not inventive or
2 transformative—indeed, engineers make these decisions all the time. *See DIRECTV*, 838 F.3d at
3 1264 (functions that “simply constitute particular choices from within the range of existing content
4 or hardware” “are not inventive”). Thus, the ordered combination of elements in claim 1 is not a
5 “non-conventional and non-generic arrangement of known, conventional pieces.” *BASCOM*, 827
6 F.3d at 1350.

7 Turning to *DDR*, the Federal Circuit there found an inventive concept in a “claimed
8 solution [that was] necessarily rooted in computer technology in order to overcome a problem
9 specifically arising in the realm of computer networks.” *DDR*, 773 F.3d at 1257. Specifically, the
10 court analyzed claims that addressed the “Internet-centric problem” of third-party merchant
11 advertisements that would “lure . . . visitor traffic away” from a host website (because clicking on
12 the advertisement would redirect the visitor to the merchant’s website). *Id.* at 1248, 1259. The
13 claims solved this problem by generating composite websites that combined the visual elements of
14 the host’s webpage with the content of the third-party merchant. *Id.* at 1248. The Federal Circuit
15 reasoned that the claims “specify how interactions with the Internet are manipulated to yield a
16 desired result” such that the interactions are “not merely the routine or conventional use of the
17 Internet.” *Id.* at 1258-59. Accordingly, there was sufficient transformation for the claims to not
18 be patent-ineligible. *Id.* at 1259.

19 Later Federal Circuit cases have clarified *DDR*. In *DIRECTV*, the Federal Circuit
20 explained that “*DDR Holdings* dealt with a patent that required doing something *to* a web page,
21 not simply doing something *on* a web page, a difference that the court regarded as important to the
22 issue of patent eligibility.” 838 F.3d at 1262. In *Electric Power*, the Federal Circuit characterized
23 *DDR* as “requir[ing] an arguably inventive device or technique for displaying information.” 830
24 F.3d at 1355. In *Synopsys*, the Federal Circuit explained that the claims in *DDR* “involved a
25 technological solution that overcame a specific challenge unique to the Internet.” 839 F.3d at
26 1138.

27 The ordered combination of elements at issue here is distinguishable from *DDR*. The crux

of the inventive concept in *DDR* was that the solution was an improvement to the technology itself. See *DIRECTV*, 838 F.3d at 1262 (“*DDR Holdings* dealt with a patent that required doing something *to* a web page, not simply doing something *on* a web page”); *DDR*, 773 F.3d at 1257 (“claimed solution is necessarily rooted in computer technology”). The same cannot be said for claim 1. Specifically, it does not “control message routing” through an improvement to message routing technology. Instead, it does so through a technology-independent solution of transmitting feedback through a separate channel. In the words of *DIRECTV*, it does not require doing something *to* message routing, but *with* message routing. 838 F.3d at 1262. Thus, *DDR* is distinguishable.

In sum, the ordered combination of elements in claim 1 neither recite a “non-conventional and non-generic arrangement of known, conventional pieces,” *BASCOM*, 827 F.3d at 1350, nor are “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer [technology],” *DDR*, 773 F.3d at 1257. Thus, claim 1 fails to recite an inventive concept. Accordingly, claim 1 fails to recite patent-eligible subject matter under § 101.

4. Alice Step Two for Remaining Asserted Claims of the ’051 Patent—Evaluation of Abstract Claims for an Inventive Concept

Plaintiff has not separately identified an inventive concept for the remaining asserted claims apart from those already discussed above. Thus, the Court need not address whether any of the additional limitations in the remaining claims provide an inventive concept. *Shakur v. Schriro*, 514 F.3d 878, 892 (9th Cir. 2008) (litigants waive arguments by failing to raise them in an opposition to a motion to dismiss); accord *John-Charles v. California*, 646 F.3d 1243, 1247 n.4 (9th Cir. 2011) (holding party “failed to develop any argument on this front, and thus has waived it”). Accordingly, for the same reasons discussed with respect to claim 1, the remaining asserted claims of the ’051 patent also fail to recite an inventive concept. Thus, they also do not recite patent-eligible subject matter under § 101.

For the foregoing reasons, the Court finds that all of the asserted claims in the ’051 patent

fail to recite patentable subject matter. Accordingly, the Court GRANTS Defendant’s Motion to Dismiss Plaintiff’s claims for patent infringement as to the asserted claims (claims 1-8, 11-20, and 22) of the ’051 patent.

C. Path Selection Patent (The ’217 Patent)

The Court now turns to the ’217 patent and determines whether its asserted claims are patent-ineligible under § 101. The Court begins with claim 15, the only claim for which either party has provided substantial briefing, and then turns to the remaining claims.

1. *Alice* Step One for Claim 15 of the ’217 Patent—Whether the Claim is Directed to an Abstract Idea

As set forth above, step one of the *Alice* framework directs the Court to assess “whether the claims at issue are directed to [an abstract idea].” *Alice*, 134 S. Ct. at 2355. Here, Defendant contends that claim 15 is directed to the abstract idea of “the selection of a communication provider for transmitting messages.” Mot. at 22. According to Defendant, this is “conventional activity” that has occurred in a variety of contexts, including when cell phone carriers select roaming partner(s), businesses select package couriers, and individuals select other individuals to deliver messages. *Id.* Defendant also argues that this concept is similar to other abstract ideas identified in other cases. *Id.*

Plaintiff does not propose an alternative statement of what claim 15 is “directed to.” Instead, Plaintiff argues that claim 15 is patent-eligible because it solves a problem “arising from the realities of a modern mobile internet”: that communication applications on mobile devices are often limited to one particular mode of communication. Opp’n at 22. According to Plaintiff, the “multi-tenant communication platform” of claim 15 provides a technical solution to this problem because it “allows developers to receive the benefit of the multiple modes of communication available in real time without the [sic] being stuck with the original communication provider and without confining the operability of the app features to within the OTT provider.” *Id.* at 23. As such, Plaintiff argues, the invention improves the functionality of computer networks and mobile applications and is patent-eligible under *Enfish* and *McRO*. *Id.* at 23-24.

To evaluate step one, the Federal Circuit instructs the Court to “appl[y] a stage-one filter to claims, considered in light of the specification, based on whether ‘their character as a whole is directed to excluded subject matter.’” *Enfish*, 822 F.3d at 1335. Thus, the Court first identifies what the “character as a whole” of claim 15 of the ’217 patent is “directed to,” and then discusses whether this is an abstract idea.

a. Character of Claim

The Court begins by examining claim 15 in its entirety to understand what its “character as a whole” is “directed to.” *Enfish*, 822 F.3d at 1335.

Claim 15 recites a method that occurs “at a multi-tenant communication platform” and that is “responsive to authentication of a communication request.” ’217 patent at col. 31:23-26. The method itself consists of three relatively simple steps: (1) looking up the “external communication providers” that are associated with a “communication destination” (as stored in a “routing address record”); (2) selecting at least one of those “external communication providers;” and (3) asking the selected “external communication provider(s)” to establish communication with the “communication destination.” *Id.* at col. 31:27-37. The end result is enabling multiple modes of communication through each of the “external communication provider(s).” *Id.* at col. 31:35-37; *see also id.* at col. 2:9-11 (“The system functions to enable transparent multi-modal communication through a communication platform.”).

Reading the entirety of claim 15 for its character as a whole, the Court finds that claim 15 is “directed to” enabling multi-modal communication by looking up and selecting one or more external communication provider(s) associated with a communication destination. This derives from the three steps of the method itself, which comprise the majority of the claim language and contribute most to its collective substance. *See* ’217 patent at col. 31:21-37; *compare Ultramercial*, 772 F.3d at 715 (identifying the “concept embodied by the *majority* of the limitations” in its step one analysis) (emphasis added). The remaining elements of the claim, such as “at a multi-tenant communication platform” and “responsive to authentication of a communication request,” are secondary details that merely set up the context in which the method

operates. *See id.* at col. 31: 23-26. As such, they are properly excluded from the Court’s “directed to” formulation. *Compare, e.g., Intellectual Ventures*, 838 F.3d at 1313 (excluding claim elements related to setup, such as “receiving . . . file content identifiers” and “creating file content IDs,” for claims directed to “filtering e-mails that have unwanted content”). Thus, “enabling multi-modal communication by looking up and selecting one or more external communication provider(s) associated with a communication destination” accurately captures what the “character as a whole” of claim 15 is “directed to.”

b. Abstract Idea Analysis

Having determined the “character as a whole” of claim 15, the Court turns to whether it is directed to an abstract idea. *Enfish*, 822 F.3d at 1335. As discussed above, courts will generally compare the claims at issue to prior § 101 cases, as well as consult several guideposts, including: (1) whether the claims are directed to an “improvement to computer functionality;” (2) whether the claims are directed to a “new and useful technique;” (3) whether the claims have an analogy to the brick-and-mortar world; and (4) whether the claims are directed to a mental process or a process that can be performed with a pen and paper. *See* Section II.C, *supra*.

For the reasons discussed below, the Court finds that both the brick-and-mortar analogy and the mental process guideposts, applied in the same way that prior § 101 cases have applied them, confirm that claim 15 is directed to an abstract idea. Thus, the Court will discuss these guideposts and then turn to Plaintiff’s remaining arguments, which all relate to the “improvement to computer functionality” guidepost.

i. Brick and Mortar Analogy

The United States Supreme Court has held that “fundamental . . . practice[s] long prevalent in our system” and “method[s] of organizing human activity” are abstract ideas. *Alice*, 134 S. Ct. at 2356 (citations and internal quotation marks omitted). As discussed above in Section III.B.1.b, *supra*, the Federal Circuit has applied this principle in several cases to find that claims are directed to abstract ideas. *See, e.g., DIRECTV*, 838 F.3d at 1258 (“providing out-of-region access to regional broadcast content” was abstract because “[t]he practice of conveying regional content to

out-of-region recipients” had been employed “by nearly every form of media” for decades); *Intellectual Ventures*, 838 F.3d at 1316 (“receiving, screening, and distributing e-mail” was abstract because these functions were akin to physical mailroom processes); *Mobile Telecoms. Techs.*, 2016 U.S. Dist. LEXIS 63067, at *6 (claims relating to “process[ing] [certain] data messages that cannot be successfully transmitted” were abstract because they were “directed to the basic idea of sending and storing messages,” which is a “routine task that could be performed by a human”).

Like the claims at issue in those cases, claim 15 is also directed to fundamental human activity. As discussed above, claim 15 is “directed to” enabling multi-modal communication by looking up and selecting one or more external communication provider(s) associated with a communication destination. Brick and mortar processes have enabled multi-modal communication in similar ways for years. For example, when an employee brings a package to the corporate mail center, the corporate mail center looks up the multiple modes of delivery that are available for the package’s destination (e.g., whether USPS, UPS, or FedEx deliver to the address, whether certain signature or tracking options are available for that address, etc.). It then informs the employee of those delivery options, and the employee selects the delivery option he prefers. As another example, when a user creates an account with a business (e.g., a frequent shopper account at a clothing store, an account with a bank, etc.), he will often indicate the ways in which the business is allowed to contact him (e.g., text, email, phone calls, physical mailings, etc.). Then, when the business wishes to contact the user about a new promotion or service, it will look up which forms of communication to which the user has agreed, and choose to send the promotional information in one or several of those ways.

Claim 15 of the ’217 patent is not different in kind from these real-world examples. Instead of enabling multiple modes of communication for packages or promotional materials, claim 15 enables multiple modes of communication for telephony messages. *See* ’217 patent at col. 31:21-37. This limits its field of use to a certain technological environment, but does not make it less abstract. *DIRECTV*, 838 F.3d at 1259 (“The Supreme Court and [the Federal Circuit]

have repeatedly made clear that merely limiting the field of use of the abstract idea to a particular existing technological environment does not render the claims any less abstract.”) (citations omitted). Accordingly, claim 15 is directed to a “fundamental . . . practice long prevalent in our system.” *Alice*, 134 S. Ct. at 2356 (citations and internal quotation marks omitted). As such, it is an abstract idea. *Id.*

ii. Mental Process

In addition, the United States Supreme Court and the Federal Circuit have also held that claims directed entirely to a “mental process” are unpatentable. *Synopsys*, 839 F.3d at 1146 (“mental processes are ‘a subcategory of unpatentable abstract ideas’”) (quoting *CyberSource*, 654 F.3d at 1371); *Gottschalk v. Benson*, 409 U.S. 63, 67, 93 S. Ct. 253, 34 L. Ed. 2d 273 (1972) (“mental processes . . . are not patentable”). This is “because the ‘application of [only] human intelligence to the solution of practical problems is no more than a claim to a fundamental principle.’” *CyberSource*, 654 F.3d at 1371 (quoting *Bilski*, 545 F.3d at 965) (alteration in original).

For example, in *CyberSource*,⁹ the Federal Circuit assessed a claim for “verifying the validity of a credit card transaction over the Internet” which involved (1) “obtaining information” about other transactions that were conducted with the same Internet address, (2) “constructing a map” of those credit card numbers, and (3) “utilizing the map of credit card numbers to determine if the credit card transaction is valid.” 654 F.3d at 1370. The Federal Circuit deemed the claim unpatentable because the entire method “can be performed in the human mind, or by a human

⁹ *CyberSource* was decided before *Alice*. However, the Federal Circuit has since revisited *CyberSource* and confirmed that it is still good law:

We held in *CyberSource* that mental processes are “a subcategory of unpatentable abstract ideas.” 654 F.3d at 1371. . . . While the Supreme Court has altered the § 101 analysis since *CyberSource* in cases like *Mayo* and *Alice*, we continue to “treat[] analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016) (citations omitted).

Synopsys, 839 F.3d at 1146-47.

1 using a pen and paper.” *Id.* at 1372. Specifically, the step of “obtaining information . . .” could
2 “be performed by a human who simply reads records of Internet credit card transactions from a
3 preexisting database.” *Id.* The step of “constructing a map . . .” could be performed “by writing
4 down a list of credit card transactions made from a particular IP address.” *Id.* The step of “using
5 the map . . .” was so broad that it “necessarily include[d] even logical reasoning that can be
6 performed entirely in the human mind.” *Id.* at 1373. Thus, the court concluded, the claim was
7 entirely directed to a mental process. *Id.*

8 More recently, in *Synopsys*, the Federal Circuit evaluated claims relating to “a method of
9 changing one description of a level sensitive latch (i.e., a functional description) into another
10 description of the level sensitive latch (i.e., a hardware component description) by way of a third
11 description of that very same level sensitive latch (i.e., assignment conditions).” 839 F.3d at 1147.
12 The Federal Circuit concluded that the claims were directed to an abstract idea because “the
13 method can be performed mentally or with pencil and paper.” *Id.* The court found this to be the
14 case by walking through how a skilled artisan could perform the claimed method mentally: he
15 could take “a four-line snippet of HDL code,” “translate this short piece of code into assignment
16 conditions,” “and further translate those two assignment conditions into a schematic representation
17 of a level sensitive latch.” *Id.* at 1147-48. Thus, the court concluded, the claims were entirely
18 directed to a mental process. *Id.*

19 Applying these principles here, the Court finds that claim 15 is also directed to a mental
20 process. As discussed above, claim 15 is “directed to” enabling multi-modal communication by
21 looking up and selecting one or more external communication provider(s) associated with a
22 communication destination. This entire process can be performed by a human using pencil and
23 paper. Specifically, a human could keep a paper list of communication destinations and the
24 external communication provider(s) associated with each. Then, to enable multi-modal
25 communication, the human could simply look up a particular communication destination in the
26 paper list, find what external communication provider(s) are associated with it, and select one or
27 several of those options. Thus, the entirety of to what claim 15 is directed constitutes a mental

process. Accordingly, for this reason as well, claim 15 is directed to an abstract idea.

iii. Improvement to Computer Functionality

Plaintiff nevertheless contends that claim 15 of the '217 patent is not directed to an abstract idea because it is instead directed to an “improvement in computer functionality” under *Enfish* and *McRO*. Neither of Plaintiff’s arguments with respect to either case is persuasive. The Court addresses each in turn.

First, Plaintiff argues that claim 15 is directed to an “improvement in computer functionality” under *Enfish* because it “improves the functionality of the network and apps built on the network infrastructure.” Mot. at 23. Plaintiff contends this is the case because enabling multiple modes of communication “facilitate[es] the best use of available network resources.” *Id.* The Court finds this argument unpersuasive. As discussed above, in *Enfish*, the Federal Circuit found that claims directed to a specific type of self-referential table in a computer database were not abstract because they focused “on the specific asserted improvement in computer capabilities (i.e., the self-referential table for a computer database).” 822 F.3d at 1335-36. In other words, the claims improved a specific technological tool (the computer database). *Id.* There is no such technological tool that is improved by claim 15. Instead, claim 15 simply claims a technology-independent abstract process that can be deployed with any communication network. Computers and generic networking components are merely invoked as tools to carry out this abstract process; there is nothing about claim 15 that improves the functioning of the computers or networking components themselves. Thus, *Enfish* is distinguishable.

Second, Plaintiff argues that claim 15 is directed to an “improvement in computer functionality” under *McRO* because it “improved the existing technical process of [communication] mode selection . . . by allowing selection among possible communication paths using a matched routing address record associating the communication destination with the available paths.” Mot. at 23-24. The Court also finds this argument unpersuasive. As discussed above, in *McRO*, the Federal Circuit found that claims directed to automating part of a preexisting method for 3-D facial expression animation were not abstract because they “focused on a specific

asserted improvement in computer animation, i.e., the automatic use of rules of a particular type.” 837 F.3d at 1314. The court found that these rules constituted an improvement in computer animation because they “automate[d] a task previously performed by humans” through an entirely “distinct process” that was different from how humans had performed that same task. *Id.* at 1314-15. This same observation cannot be made for claim 15. Instead, as discussed above, the “process of [communication] mode selection” in claim 15 is the same process that a human would use if performing this process manually. Thus, for this reason, *McRO* is distinguishable.

In sum, claim 15 is directed to a “fundamental . . . practice long prevalent in our system,” *Alice*, 134 S. Ct. at 2356 (citations and internal quotation marks omitted), limited to a specific technical environment. It is also directed to a method that can be “performed mentally or with pencil and paper.” *Synopsys*, 839 F.3d at 1147. It is not directed to an “improvement in computer functionality” under *Enfish*. 822 F.3d at 1335. Thus, claim 15 is directed to an abstract idea.

2. *Alice* Step One for Remaining Asserted Claims of the ’217 Patent—Whether the Claim is Directed to an Abstract Idea

The Court now turns to the remaining asserted claims of the ’217 patent and determines whether, in light of its conclusion that claim 15 is directed to an abstract idea, these remaining claims are also directed to an abstract idea. The Court first addresses claims 16 through 19, then addresses claims 1 through 12.

a. Claims 16 and 17

Claim 16 depends on claim 15, and claim 17 depends on claim 16. Both claims 16 and 17 introduce additional steps for accomplishing one portion of what claim 15 is directed to: looking up external communication provider(s) associated with a communication destination.¹⁰ As such, claims 16 and 17 clarify this aspect of claim 15 and do not substantially shift its “character as a whole.” Indeed, the Court’s observations regarding how claim 15 is directed to a mental process

¹⁰ In particular, claim 16 additionally requires that a routing address record is generated based on registration information provided by the external communication provider. ’051 patent at col. 31:38-32:4. Claim 17 additionally requires that the routing address records are stored at the communication platform. *Id.* at col. 32:5-9.

also hold true for claims 16 and 17, as the additional steps in these claims could also be performed mentally or with pencil and paper. For example, the “registration information provided to the communication platform” of claim 16 can just be information that is added to a paper list. *See* ’051 patent at col. 31:38-32:4. Accordingly, the “character as a whole” of claims 16 and 17 is substantially the same as claim 15, and they are directed to an abstract idea for the same reasons.

b. Claim 18

Claim 18 depends on claim 17. Claim 18 additionally introduces additional detail about how a “communication request” is authenticated. As discussed above, the Court determined that, for claim 15, the element of “responsive to authentication of a communication request” was secondary to other elements of the claim and not part of what the “character as a whole” of claim 15 is directed to. However, the introduction of additional details regarding authentication in claim 18 place a greater emphasis on authentication. As such, this element is no longer secondary and must also be considered as part of the “character as a whole” of claim 18.

Nevertheless, claim 18 is still directed to an abstract idea. As discussed below, claim 1 also includes an authentication feature,¹¹ but it is still directed to an abstract idea. Thus, for the same reasons as discussed below with respect to claim 1, the introduction of an authentication feature does not make a claim not abstract. Thus, claim 18 is also directed to an abstract idea.

c. Claim 19

Claim 19 depends on claim 18. Claim 19 provides more detail about how selecting external communication provider(s) is accomplished.¹² As such, this additional detail clarifies

¹¹ The Court acknowledges that the authentication feature in claim 1 is recited in broader terms than the authentication feature in claim 18. *Compare* ’051 patent at col. 29:41-44, *with id.* at col. 32:10-19. Nevertheless, even as more specifically claimed, the additional authentication features in claim 18 do not bring them out of the realm of the abstract. In particular, the additional feature recited in claim 18 is use of an “authentication token” to determine whether the account identifier is valid. *Id.* at col. 32:10-19. However, “authentication token” generically refers to any data or object that the external system can submit to verify that the account identifier is valid. *See id.* at 18:4-14. It is no less abstract than a passcode that a person speaks to get access to a clubhouse. Thus, even with the addition of the “authentication token” feature, claim 18 is abstract.

¹² In particular, claim 19 additionally requires the use of a communication profile that is “one of a global communication profile and an account communication profile associated with the account identifier of the external system.” ’051 patent at col. 32:20-30.

how external communication providers are selected in claim 19, but does not substantially shift its “character as a whole.” Accordingly, the “character as a whole” of claim 19 is substantially the same as claim 18, and claim 19 is directed to an abstract idea for the same reasons.

d. Claim 1

Claim 1 is an independent claim. Nevertheless, claim 1 recites substantially similar elements as claim 16. *Compare* ’217 patent at col. 29:35-30:3, *with id.* at col. 31:21-32:4. The only palpable difference between these two claims is that claim 1 additionally recites the step of “determining whether the account identifier [of the external system] is valid.” *Id.* This shifts the focus of claim 1 from that of claim 16 by introducing an authentication feature into the “character as a whole” of claim 1. To state this concretely, whereas claim 16 is directed to “enabling multi-modal communication by looking up and selecting one or more external communication provider(s) associated with a communication destination,” claim 1 is directed to “enabling multi-modal communication from an authenticated request from an external system by looking up and selecting one or more external communication provider(s) associated with a communication destination.”

The question then becomes whether this revised “directed to” formula constitutes an abstract idea. The Court concludes that it does. Claim 1 recites the broad concept of authentication that is untethered to any specific means of implementing it—it only requires a determination that the “account identifier is valid.” ’217 patent at col. 29:41; *see DIRECTV*, 838 F.3d at 1258 (observing that “providing out-of-region access to regional broadcast content is an abstract idea” because it is a “broad and familiar concept . . . that is untethered to any specific or concrete way of implementing it”). This step can be performed mentally or with pencil and paper. For example, a human could simply keep a paper list of valid account identifiers and check to see whether a specific account identifier is in that list. There are also brick and mortar analogs to this process. For example, a corporate mail room could verify that the employee seeking to deliver a package is a valid employee at the company or has a valid corporate mailing account. Thus, even with the additional requirement of “determining whether the account identifier [of the external

system] is valid,” claim 1 is directed to an abstract idea.

e. Claims 2-12

Claims 2-12 depend on claim 1. The additional limitations of claims 2-12 add minor restrictions on certain elements of claim 1, such as types of external communication providers,¹³ types of communication destinations,¹⁴ how looking up external communication provider(s) associated with a communication destination is accomplished,¹⁵ how authentication is accomplished,¹⁶ and how an external communication provider is selected from a set of options.¹⁷ As such, they provide additional clarifying detail on how certain aspects of claim 1 operate, but do not substantially shift the “character as a whole.” Accordingly, these claims are directed to an abstract idea for the same reasons that claim 1 is directed to an abstract idea.

3. *Alice* Step Two for Claim 15 of the ’217 Patent—Evaluation of Abstract Claims for an Inventive Concept

Having found that the asserted claims of the ’217 patent are directed to an abstract idea under step one of *Alice*, the Court proceeds to step two. Here too the Court begins its analysis with claim 15. As discussed above, at step two, the Court must “consider the elements of each

¹³ In particular, claim 4 additionally restricts the external communication provider to “at least one of an SMS service provider, MMS service provider, push notification service provider, IP messaging service provider, proprietary third party OTT messaging service provider, proprietary third party OTT communication service provider, PSTN service provider, SIP voice service provider, Video communication service provider, screensharing service provider, fax service provider, and email service provider.” ’051 patent at col. 30:19-27.

¹⁴ In particular, claim 5 additionally restricts the communication destination to “least one of a phone number, an email address, an IP address, and an account identifier of a communication provider.” ’051 patent at col. 30:28-31. Claim 10 additionally restricts the communication destination to one that is associated with “a plurality of communication providers.” *Id.* at col. 30:51-53.

¹⁵ In particular, claim 2 additionally requires the use of a routing address identifier and deterministic endpoint address in locating a routing address record. ’051 patent at col. 30:4-9. Claims 3, 7, and 8 additionally require that a routing address record is generated based on registration information provided by the external communication provider. *Id.* at col. 30:10-18, 30:36-46. Claim 9 additionally requires using the account identifier of the external system as a part of the lookup process. *Id.* at col. 30:47-50.

¹⁶ In particular, claim 6 additionally requires that authentication is accomplished using an account identifier and that the communication request is denied in a case where the request is not authenticated. ’051 patent at col. 30:33-36.

¹⁷ In particular, claim 11 additionally requires the use of a communication profile that is “one of a global communication profile and an account communication profile associated with the account identifier of the external system.” ’051 patent at col. 30:54-61.

claim both individually and ‘as an ordered combination’” to “search for an ‘inventive concept’— i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.’” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 132 S. Ct. at 1298, 1297).

Here, Defendant argues that claim 15 does not recite an inventive concept because it merely uses “conventional and generic computing components” to implement an abstract idea. Mot. at 22-23. Specifically, Defendant contends that the claims only arguably recite two hardware components—the “multi-tenant communication platform” and the “external system”—and both are conventional. *Id.* at 22. In addition, Defendant argues that each of the steps of claim 15 are conventional activities performed by telecommunication carriers and, as such, fail to provide an inventive concept. *Id.* at 22-23.

Plaintiff disagrees, and argues that both the individual elements of claim 15 and their ordered combination provide an inventive concept. Opp’n at 24-25. With respect to individual elements, Plaintiff argues that the components mentioned in the claims, including the “multi-tenant communication platform,” “external system,” and “application server” are not generic components. *Id.* at 25. With respect to the ordered combination of claim elements, Plaintiff argues that this combination provides a “specific, non-generic improvement to multitenant, multi-mode networks” in the form of “automating communication mode selection by matching destination information with address records that are used to identify available modes.” *Id.*

In assessing whether a claim recites an inventive concept, the Court, under *Alice*, must consider its elements “both individually and ‘as an ordered combination.’” *Alice*, 134 S. Ct. at 2355. The Court begins with the individual claim elements, and then turns to their ordered combination.

a. Individual Claim

Turning first to the individual claim elements, the Court finds that none of these elements, by themselves, provide an “inventive concept.” The Court first addresses the functions recited in claim 15, and then addresses the components on which they operate.

Turning first to the functions, the Court finds that none of the functions recited in claim 15 provide an inventive concept. As discussed above, “computer functions [that are] ‘well-understood, routine, conventional activit[ies]’ previously known to the industry” do not provide an inventive concept. *Alice*, 134 S. Ct. at 2359 (quoting *Mayo*, 132 S. Ct. at 1294). All of the functions recited the steps of claim 15 fall within this category. Specifically, “determining a . . . record” refers to conventional database lookup, “selecting . . .” refers to the generic activity of selecting from options, and “providing a request to establish communication” refers to the conventional networking activity of initiating communication. Further, doing these activities “responsive to authentication . . .” implicates the conventional computer function of verifying a condition before proceeding. Thus, none of the functions recited in claim 15, by themselves, provides an inventive concept.

Turning to the components on which these functions act, the Court also finds them devoid of an inventive concept. As discussed above, “generic computer implementation” does not provide an inventive concept. *Alice*, 134 S. Ct. at 2352, 2357. None of the components in claim 15 amount to anything more than this. Claim 15 mentions only two components that implicate hardware: the “multi-tenant communication platform” and the “external system.” *See* ’217 patent at col. 31:21-37. However, these are generic terms for any telephony platform or server, and the specification makes clear that they can be implemented in a wide variety of ways. *See id.* at col. 2:46-3:4 (describing wide range of possible “multi-tenant communication platforms,” including that “[t]he telephony platform can be . . . any suitable network accessible computing infrastructure”); *id.* at col. 2:67-3:4 (stating that the patented system can be “used in combination with . . . any suitable communication platform”); *id.* at col. 4:10-13 ([t]he communication platform can “use any suitable logic to determine a content and destination of a communication”); *id.* at col. 16:18-24 (stating that the external system “includes an application server” and a “device”).

Claim 15 recites five software components: “communication request,” “communication destination,” “account information,” “routing address record,” “external communication provider[,]” and “request to establish communication.” *See* ’217 patent at col. 31:21-37. All of

these are generic software components, and nothing in the claims or specification limits them to specific implementations. Instead, as discussed above, the specification confirms their generic nature. *See id.* at col. 3:17-21 (communication destination can be “any suitable communication endpoint”); *id.* at col. 7:17-18 (“records may include various sets of information depending on the information that is collected”); *id.* at col. 8:11-20 (“communication service may be specifically configured for . . . any suitable communication medium” or “may be used for a plurality of communication mediums”); *id.* at col. 8:20-23 (“communication request can include communication properties, which can include at least one destination endpoint, one originating endpoint, communication content, and/or other properties of the communication”); *id.* at col. 13:29-31 (account information can be “any suitable source information”). Thus, none of the claim elements amounts to anything more than “generic computer implementation” and cannot provide an inventive concept.

b. Ordered Combination

Turning to the ordered combination of elements in claim 15, Plaintiff argues that the ordered combination provides an inventive concept under the Federal Circuit’s decisions in *BASCOM* and *DDR*. The Court addresses each in turn.

With respect to *BASCOM*, Plaintiff argues that the ordered combination of elements of claim 15 provides an inventive concept because the combination “recites a specific, discrete improvement to mode selection.” Opp’n at 25. This argument is unconvincing. As discussed above, in *BASCOM*, the Federal Circuit found that “an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces.” *BASCOM*, 827 F.3d at 1350. Plaintiff points to no aspect of how the elements of claim 15 are combined that is “non-conventional” or “non-generic,” and the Court discerns none. To the contrary, the specification of U.S. Patent No. 8,306,021 (“the ’021 patent”), which the ’217 patent incorporates by reference, confirms that the combination of elements in claim 15 was conventional and known at the time. For example, the specification of the ’021 patent discusses performing database-style look ups within the context of communication processing. ’021 patent at col. 6:18-24. Thus, claim 15’s

combination of looking up communication providers associated with a communication destination with a multi-tenant communication platform is not unconventional. Accordingly, *BASCOM* is inapposite.

With respect to *DDR*, Plaintiff argues that the ordered combination of elements of claim 15 provides an inventive concept because it recites “a specific way to improve multitenant mobile internet technology by automating communication mode selection by matching destination information with address records that are used to identify available modes.” Opp’n at 25. This too is unconvincing.

As discussed above, in *DDR*, the Federal Circuit found an inventive concept in a “claimed solution [that was] necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *DDR*, 773 F.3d at 1257. Specifically, the claims overcame the problem of third-party advertisements that would “lure . . . visitor traffic away” from a host website through a solution of generating composite websites that combined the visual elements of the host’s webpage with the content of the third-party merchant. *Id.* at 1248. As the Federal Circuit later explained, “*DDR Holdings* dealt with a patent that required doing something *to* a web page, not simply doing something *on* a web page.” *DIRECTV*, 838 F.3d at 1262.

Claim 15 is distinguishable from *DDR*. Unlike the composite website of *DDR*, the claimed solution of claim 15 is not “necessarily rooted in computer technology.” *DDR*, 773 F.3d at 1257. Instead, the solution of claim 15 relies on a technology-independent abstract idea: looking up which external communication provider(s) are associated with a communication destination and selecting one or more of those providers. *See* ’217 patent at col. 31:21-27. It does not improve networking or communication technology itself. Thus, it falls outside the rationale of *DDR*. *Compare, e.g., DIRECTV*, 838 F.3d at 1262 (distinguishing *DDR* because the claims at issue were “not directed to the solution of a technological problem [but instead] the general concept of out-of-region delivery of broadcast content through the use of conventional devices, without offering any technological means of effecting that concept.”); *Synopsys*, 839 F.3d at 1152 (distinguishing *DDR*

because the claims at issue “are for a mental process” and “do not introduce a technical advance or improvement”).

In sum, the ordered combination of elements in claim 15 neither recites a “non-conventional and non-generic arrangement of known, conventional pieces,” *BASCOM*, 827 F.3d at 1350, nor is “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer [technology,” *DDR*, 773 F.3d at 1257. Thus, it fails to recite an inventive concept. Accordingly, claim 15 fails to recite patent-eligible subject matter under § 101.

4. *Alice* Step Two for Remaining Asserted Claims of the ’217 Patent—Evaluation of Abstract Claims for an Inventive Concept

Plaintiff has not separately identified an inventive concept for any of the remaining asserted claims of the ’217 patent apart from those already discussed above. Thus, the Court need not address whether any of the additional limitations in the remaining claims provide an inventive concept. *Shakur*, 514 F.3d at 892 (litigants waive arguments by failing to raise them in an opposition to a motion to dismiss); *accord John-Charles*, 646 F.3d at 1247 n.4 (holding party “failed to develop any argument on this front, and thus has waived it”). Accordingly, for the same reasons discussed with respect to claim 15, the remaining asserted claims of the ’217 patent also fail to recite an inventive concept. Thus, they also do not recite patent-eligible subject matter under § 101.

For the foregoing reasons, the Court finds that all of the asserted claims in the ’217 patent fail to recite patentable subject matter. Accordingly, the Court GRANTS Defendant’s Motion to Dismiss Plaintiff’s claims for patent infringement as to the asserted claims (claims 1-12 and 15-19) of the ’217 patent.

IV. CONCLUSION

For the foregoing reasons, the Court GRANTS Defendant’s Motion to Dismiss with respect to the asserted claims of the ’051 patent (claims 1-8, 11-20, and 22) and the asserted claims of the ’217 patent (claims 1-12 and 15-19).

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IT IS SO ORDERED.

Dated: April 17, 2017



LUCY H. KOH
United States District Judge